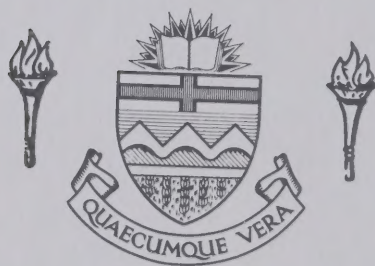


For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAENSIS



REQUEST FOR DUPLICATION

entitled Meaning in Life & Religious Commitment

Date	Name and address	Pages copied	Signature
MARCH 4/80	M. CLOOKS,	1-5 (inclusive)	
	STUDENT COUNSELLING.	6-18. "	
		25 only	
		28-32 (inclusive)	
		35-90 (")	

THE UNIVERSITY OF ALBERTA

MEANING IN LIFE AND RELIGIOUS COMMITMENT
OF CATHOLIC HIGH SCHOOL STUDENTS

by



ROSE MARIE CECELIA HAGUE

A THESIS
SUBMITTED TO THE FACULTY OF
GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION
IN
COUNSELLING
PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA
FALL, 1978

DEDICATION

To my husband, Bill, and our daughter, Carolyn,
who by your intensely beautiful love have helped
me discover a rich and profound life meaning.

ABSTRACT

The theory of logotherapy, developed by Viktor Frankl, a Viennese psychiatrist, focuses on the centrality of the essential meaning of human existence and man's attempts to discover that meaning.

The purpose of this research is to investigate the relationship between the degree to which a person experiences meaning and purpose in life and his religious commitment. The participants were 235 students from two Edmonton Catholic High Schools: St. Francis Xavier and Louis St. Laurent. The sample consisted of 115 males and 120 females in Grades X, XI and XII. Three research instruments were employed in the study: The Purpose in Life Test (Crumbaugh and Maholick, 1968), the Seeking of Noetic Goals Test (Crumbaugh, 1977), and a Religious Commitment Scale (Weigert and Thomas, 1970, modified form based on Glock and Stark, 1965).

The basic hypothesis of a significant positive correlation between meaning in life and religious commitment was confirmed. The students who have found meaning in life reported a higher degree of religious commitment than those who had not discovered life meaning. Once the students had found life meaning they tended not to be motivated to discover further meanings. No significant differences were found between male and female students in perceiving life meaning. In this study with a small age differential, no significant correlation was found between age and the degree to which the students have discovered a life purpose.

The traditional supposition that females are more religious than males was supported by this study. Female students expressed a higher degree of submission to religious authorities than did their male

counterparts. With increase in age, the students tended to question traditional religious beliefs and practices to a greater extent. The influence of religion on the mother was found to have significantly influenced her teenage children's discovery of life meaning, whereas no similar influence was reported for the father. Finally, whether or not the parents were Catholic, was not a differentiating factor in the degree of life meaning discovery by students in this study.

A factor analysis of the Purpose in Life Test and the Seeking of Noetic Goals Test was conducted and 11 principal components were subjected to Varimax rotation, Kaiser's strict limit being used. The eleven factor loadings were interpreted to reveal common factors inherent in the meaning in life construct as well as factors specific to each of the two tests under consideration.

ACKNOWLEDGEMENTS

I wish to express my gratitude to the following people who have contributed to the completion of this thesis:

My thesis Chairman, Dr. H. Janzen, for his encouragement and knowledgeable support.

The members of my thesis committee, Dr. W. Schmidt and Dr. R. Carney for their helpful guidance.

Administrators and teachers of the Edmonton Catholic Schools for their cooperation in this study.

The students of St. Francis Xavier and Louis St. Laurent High Schools for their generous participation.

My typist, Sheri McLean, for her patience in typing the manuscript.

The Religious Studies and Moral Education Council of the Alberta Teachers' Association for their financial award.

TABLE OF CONTENTS

CHAPTER		PAGE
I	INTRODUCTION	1
	Statement of the Problem	1
	Purposes of the Study	3
	Significance of the Study	4
	Limitations of the Study	5
II	THEORETICAL FRAMEWORK AND RELATED LITERATURE	6
	Logotherapy	6
	The Man: V. Frankl	6
	Basic Tenets of Logotherapy	7
	Freedom of Will	7
	The Will to Meaning	7
	A Meaning to Life	8
	Meaning in Life and Youth	9
	Empirical Evidence of Meaninglessness	11
	Adolescent Valuing	15
	Religious Meaning	18
	Development of Adolescent Religious Identity and Commitment	21
III	METHODOLOGY AND RESEARCH PROCEDURES	25
	Description of Sample	25
	Research Instruments	28
	The Purpose in Life Test	28
	The Seeking of Noetic Goals Test	31
	Dimensions of Religious Commitment Scale	33
	Hypotheses	35
	Factor Analysis	36
	Analysis of Data	37
IV	INTERPRETATION OF DATA	38
	Discussion of Hypotheses	38

CHAPTER		PAGE
	Hypothesis I	38
	Hypotheses II - III	40
	Hypothesis IV	41
	Hypotheses V - VI	43
	Hypothesis VII	44
	Hypotheses VIII - IX	46
	Discussion of Selected Responses Patterns	46
	Factor Analysis of the Purpose in Life and Seeking of Noetic Goals Tests	67
V	CONCLUSION AND IMPLICATIONS	78
	Theoretical Conclusions	78
	Educational Implications	81
	Suggestions for Further Research	83
	BIBLIOGRAPHY	85
	APPENDICES	91
	Appendix A: The Seeking of Noetic Goals Test	91
	Appendix B: The Purpose in Life Test	94
	Appendix C: Dimensions of Religious Commitment Scale	98
	Appendix D: Varimax Loadings on 11 Factors of the PIL and SONG Tests	104

LIST OF TABLES

TABLE		PAGE
I	Sample Characteristics	26
II	Percent Reporting Influence of Religion on Parents	27
III	Correlations Matrix	39
IV	Comparison of Selected Group Mean Scores	42
V	Mean Scores of Pertinent Variables	47
VI	Purpose in Life Responses	49
VII	Seeking of Noetic Goals Responses	54
VIII	Religious Knowledge	60
IX	Religious Belief	61
X	Ethical Belief	62
XI	Religious Experience	63
XII	Religious Practice	64
XIII	Religious Consequences	65
XIV	Varimax Factor Loading Matrix (Factors 1,2)	68
XV	Varimax Factor Loading Matrix (Factors 3,4)	70
XVI	Varimax Factor Loading Matric (Factors 5-8)	72
XVII	Varimax Factor Loading Matrix (Factors 9-11)	74
XVIII	Specific and Common Factors of the PIL and SONG Tests	77

LIST OF FIGURES

FIGURE		PAGE
1	PIL and SONG Scree Test	66

CHAPTER I

INTRODUCTION

Statement of the Problem

"He who has a why to live can bear with almost any how." Nietzsche

The meaning and purpose of life is certainly one of the deepest of human concerns. Involvement with young people, especially teenagers, both within the classroom and in counselling sessions, brings an awareness of the aimlessness, meaninglessness, alienation, lack of purpose and direction on the one hand, coupled with a growing search, even a desperate struggle to find satisfactory life-meaning, a purposefulness and hopefulness on the other.

It is within this context that the personal and literary witness of the internationally renowned psychiatrist, Viktor Frankl, with his theory of logotherapy, has been found to be a useful framework for searching with young people in the area of meaningfulness. Recent literature assesses the valuelessness among youth (Maslow, 1967); the increasing evidence of existential vacuum among students (Frankl, 1975); the noogenic neurosis, the collective neurosis of our time (Frankl, 1975); and the almost epidemic proportions of the modern stress of purposelessness among the young (Selye, 1977). Research employing such instruments as the Purpose in Life Test (Crumbaugh and Maholick, 1968), the Seeking of Noetic Goals Test (Crumbaugh, 1977) as well as the Logo-Test developed by E. Lukas have provided empirical validation for the logotherapeutic concepts of meaning in life or the lack thereof resulting in existential vacuum.

According to logotherapy each person's life has a meaning and

purpose and even when faced with the most inhuman conditions it is the essential role of each person to discover that meaning. The will to meaning becomes the primary motivation for living, a basic desire to make sense of life in spite of apparent senselessness, chaos, boredom and injustice. Man has the freedom to discover meaning which is present in what he does, in what he experiences or at least in the stand he takes in the face of situations of unchangeable suffering. This basic freedom, the pursuit of meaning, tends to be thwarted in an age of affluence, hedonism, materialism, and reductionism. A psychology which reduces human beings to computers that can be manipulated and replaced, or to animals that can be trained disregards man's basic freedom. Logotherapy, on the contrary, refocuses man's attention in a qualitative sense on life goals, ideals, potentials, and underscores the ability to control one's life. The resources within the human spirit are called upon to combat doubt, frustration, despair or existential vacuum.

Man's primary aspiration is to find meaning and purpose in human existence which gives each person a sense of unique identity. Only man has the capacity to enter the uniquely human or noetic dimension of experience; a becoming aware of the spiritual significance of life and of the relationship of his personal life meaning to the meaning of life in general.

Finding meaning implies in the last analysis a spiritual experience. However, it should be noted, that the connotation of the word "spiritual" ('geistig', in German) is not a reference to "religious" in the ecclesiastical sense, but has a much broader meaning. It refers to the non-material side of life. Within the theory of logotherapy,

"spiritual" refers to the striving, the aspirational, the inspirational aspects of mind. Thus "spiritual" may or may not include the religious dimension. However, when it does include the religious aspect, does a religious person, then, experience a high degree of satisfactory life meaning? And are persons with satisfactory life meanings also religious persons? It is to questions such as these, with specific reference to youth, that the author of this study wishes to address herself.

Purposes of the Study

The general purpose of this study is to investigate the relationship between the degree to which a person experiences meaning and purpose in life and his religious commitment. Specifically, this study in order to focus on meaninglessness among youth, will assess Grade X, XI and XII High School students enrolled in the Edmonton Catholic School System as to the relationship between reported meaning in life, existential vacuum, motivation to find meaning and aspects of religiosity consisting of the experiential, the ritualistic, the ideological, the intellectual and the consequential dimensions.

Certain basic questions will be considered. Do high school students who have found a clear life meaning also possess a strong religious commitment? Once these students have found meaning, do they cease searching for further meanings? Are teenage girls any different than boys in the degree to which they have found life meaning? Will the Grade XII students report a greater degree of life purpose than the Grade X students? Does the fact that the parents are Catholic make any difference in their teenager's perceived life purpose? Will the fact that their parents have been strongly influenced by religion have a bearing on a teenager's life meaning? Are teenage girls more religious

than teenage boys? How strongly is belief related to meaning in life for these teenagers? Finally, are the older high school students any more religious than their younger counterparts?

Since tenets of logotherapy remain somewhat elusive and difficult to define operationally despite numerous attempts, an effort will also be made to delineate common factors inherent in the Purpose in Life Test and the Seeking of Noetic Goals Test employed in this study.

Significance of the Study

The results of this research project should be of general interest to teachers and administrators as well as to parents and students. At a time when there is a growing demand for basic education, for more effective curriculum development and for greater facilitation of responsible adult-teenage communication, an attempt to delineate basic meaning in life questions has significance.

Information obtained in this study should also prove valuable for individual and group counsellors. The growing success of logotherapeutic counselling in which the counsellor recognizes the need for meaning and then assists in the discovery of that meaning to combat purposelessness, hopelessness, boredom and frustration especially among youth necessitates an awareness of the needs of youth and the potential of logotherapy.

With Maslow (1964), the author of this study wishes to underscore the final and unavoidable conclusion that psychotherapy and education, indeed all our social institutions must be concerned with meaning questions, final values, "spiritual" questions, ultimate values.

Limitations of the Study

Since the study under consideration restricts itself to students from two high schools within the Edmonton Catholic School system, the resultant findings should be generalized only to comparable student populations.

The instruments employed in this study consist of responses necessitating self-reports. Only to the extent that such reports represent the authentic attitudes and behaviors of the respondents may they be deemed valid assessments.

CHAPTER II

REVIEW OF RELATED LITERATURE

Logotherapy

The theory of logotherapy (Gr. 'logos', meaning), formulated by Viktor Frankl, a Viennese psychiatrist, focuses on the centrality of the essential meaning of human existence and man's attempt to discover such a meaning (Frankl, 1959).

Within the context of logotherapy, it is this need to find a meaning in life which constitutes man's primary motivational force.

The Man: V. Frankl

Born of Jewish parents in 1905, Viktor Frankl studied medicine at the University of Vienna, where he received his M.D. degree as well as a Ph.D. in philosophy. He taught at the University of Vienna Medical School as a neuropsychiatrist, but during World War II he and his family were incarcerated in the Nazi Concentration camps. The rest of his family was killed, but during the three years Frankl spent in the confines of these camps, he was able to develop his theory of logotherapy. Reflecting on his personal experiences, on the sufferings and deaths of others, and especially on his own need for a sustaining meaning in life, he concluded with Nietzsche that "He who has a why to live can bear with almost any how" (Frankl, 1959, p. 121). What is required to survive, in even the most inhuman of situations is a conviction that life always has a meaning and purpose. Active rather than passive, each person's role is to discover and live that meaning until death. Upon returning to the University of Vienna after World War II Frankl began to formalize logotherapy as a system.

Basic Tenets of Logotherapy

Freedom of Will

The concept of man in logotherapy (Frankl, 1969) is basically an existential position: "Man is free to rise above the somatic and psychic determinants of his existence" (p. 3). Though man is not free from the biological, sociological or psychological conditions that constitute his life situation, he is and always remains free to choose his attitude toward them. As a being capable of taking a stand toward the world and toward himself, man experiences a new dimension, that of the noetic. In his self-consciousness wherein man reflects upon himself and is capable of judging his own deeds, he participates in that which renders him specifically human. Frankl has designated this specifically human dimension as the space of the noological which becomes operationalized in the logotherapeutic techniques of paradoxical intention and dereflection, allowing patients to alter neuroses by changes of attitudes. Man has the capacity for self-detachment and self-transcendence. "Being human is being always directed, and pointing to something or someone other than oneself: to a meaning to fulfill or another human being to encounter, a cause to serve or a person to love" (Frankl, 1978, p. 35).

The Will to Meaning

From the first basic philosophical assumption of logotherapy, that of freedom of will, follows a second assumption; will to meaning. Man is a being reaching out for meanings to fulfil; he is responsible for the specific meanings of his personal life, but also "responsible before something, or to something, be it society, or humanity, or mankind, or his own conscience" (Frankl, 1965).

For Frankl, the will to meaning, as a more apt motivational theory for man, is contrasted with that of the Freudian "will to pleasure" and the Adlerian "will to power". That all of man's behavior is influenced by a unitary principle is true, but it is rather the will to meaning which is the real underlying human need. Pleasure-seeking and power-seeking behavior are evident in man's activities, however, these are distortions of the primary motivational force to find meaning and purpose in life. To Freud's hedonism, Frankl attributes a compensatory function that results when the will to meaning is frustrated; to Adler's mastery principle, he ascribes an expressive function, the striving for mastery as an expression of the means by which meaning is sought. Maslow's concept of self-actualization is regarded by Frankl (1978) as the unintended effect of self-transcendence. To make self-actualization, identity or happiness the target of intention would be self-defeating. Rather it is the will to meaning that is man's primary concern.

A Meaning to Life

The third basic logotherapeutic tenet affirms that there is a meaning in life. This meaning is available to everyone and, moreover, life retains its meaning under any conditions (Frankl, 1978). Each life situation is unique as is the meaning of a situation. For Frankl, individual meanings cannot thus be transmitted through tradition, nor lost by the decay of traditions. What is affected by the decay of traditions, as evident in the current age, are universal meanings or values.

Life meanings are ever changing. The discovery of meaning has been compared to a process of Gestalt perception in which a figure is

visualized against a background (Crumbaugh, 1973). To Frankl (1978) discovering meaning is, in effect, the perceiving of a possibility embedded in reality. Beyond finding meaning in performing a deed, creating a work and experiencing or encountering someone, man is also challenged to find meaning in a tragedy or suffering which cannot be changed. To find meaning in suffering is to transform a tragedy into a personal achievement; it witnesses to the uniquely human potential of self-detachment. It represents an awareness of the spiritual significance of man's life and of his unique relationship to this broad life meaning. This spiritual significance of life is not restricted to its religious sense but has a secular meaning, available to all regardless of religious attitudes. That meaning discovery and fulfillment is often difficult, is not underestimated in the logotherapeutic framework. When meaning is not found, existential vacuum results, which affects in some degree more than half of the general population and has been regarded by Frankl as the collective neurosis of our times. It manifests itself most readily in boredom, apathy and existential frustration. In its extreme form existential vacuum develops into noogenic neurosis to which neurotically disposed persons are inclined. Frankl has estimated that approximately 20 per cent of a psychotherapeutic caseload suffers this extreme loss of existential meaningfulness.

Meaning in Life and Youth

Maslow (1967) has provided this assessment of valuelessness among the young:

I believe that much of the social pathology of the affluent (already lower-need-gratified) is a consequence of intrinsic-value-starvation ... The metapathologies of the affluent and indulged young come partly from deprivation of

intrinsic values, frustrated "idealism", from disillusionment with a society they see (mistakenly) motivated only by lower or animal or material needs.

Meaningfulness, life sense and purpose are included with truth, goodness, justice and the other metaneeds, as basic human needs. Maslow notes that disorders which accompany deprivation of these metaneeds may be considered as metapathologies. Existential vacuum, alienation, anomie, boredom, meaninglessness and valuelessness are descriptive attempts to convey the conditions of such deprivations.

For the adolescent, the meaning question is both a personal and a social concern. According to Mitchell (1971), adolescent alienation may be a reaching out, a movement towards growth on the part of the individual to more fully actualize himself, to transcend the deficiencies of the existing social structure. Alienation may also become an acting out, of struggling against the social structure because of deficiencies and unmet needs within the individual. Our teenage population, in its efforts to find meaningfulness is faced with at least these two general options.

Purposelessness has been designated by Selye (1977) as the worst of all modern stresses. This type of social stress, the loss of motivation, has greatly increased in our time and has assumed almost epidemic proportions among the young. The desperate attempts to escape the dilemma, Selye concludes, are evident in the growing violence, alcoholism and drug addiction brought about by the loss of the stabilizing support of constructive goals. That the future is in the hands of those who can give tomorrow's generation valid reasons to live and hope is similarly applicable to the generation of today.

The studies on the increasing rate of suicide among teenagers in

recent years (Davidson et al., 1972; Boldt, 1976) have identified a lack of meaning in life along with problems of family adjustment and emotional disorders as the principal motivating factors associated with attempted suicide. Grollman (1974) notes the dramatic increase in suicide among young people as the third leading cause of death among teenagers and second among college students. The situation becomes even more serious when we realize that for each successful suicide probably fifteen more have attempted it but failed.

Empirical Evidence of Meaninglessness

Attempts to measure the sense of meaninglessness among youth, have been quite extensive.

The Purpose in Life Test was administered to a group of 58 college students who were also interviewed as to their world view and life goals (Sharpe and Viney, 1973). The interviews were subsequently rated by three judges who noted tendencies to meaninglessness. Results indicated that those subjects who indicated negative world views, purposelessness and a lack of transcendent goals also scored at the meaninglessness level on the Purpose in Life Test.

Meir and Edwards (1974) administered the Purpose in Life Test and the Frankl Questionnaire (Frankl, 1966) to 200 randomly chosen nonpatient subjects divided into five age groups: 13-15, 17-19, 25-35, 45-55, and 65+ years. The two youngest age groups were found to score significantly lower on the Purpose in Life Test than the three older age groups, with the exception that the 13-15 and the 25-35 age group did not differ. No differences in scores between males and females were noted.

Research to discover whether purpose in life was related to

specific values was reported by Crandall and Rasmussen (1975). The Purpose in Life Test and the Rokeach Value Survey were administered to 86 undergraduate volunteers. Low scores on the Purpose in Life Test were associated with the values of pleasure, excitement and comfort. These results tend to support the contention that a hedonistic approach to life contributes to existential vacuum (Frankl, 1955). The value of salvation was associated with relatively high scores on purpose in life. Such research is consistent with the views of Frankl (1965, 1975) and Crumbaugh et al (1970), suggesting that a genuine, intrinsic religious orientation may assist in fostering greater perceived meaning in life.

A further study on the relationship between religious values and purpose in life (Crandall and Rasmussen, 1975) involved 71 psychology student volunteers who were administered the Intrinsic-Extrinsic Religious Orientation Scale. Results indicated that perceived purpose in life correlates with an intrinsic religious orientation, but not with an extrinsic orientation.

Garfield (1973) investigated the difference between the concepts of existential vacuum and anomie. Existential vacuum comprises a failure to experience a sense of life meaning which provides a self-identity, whereas anomie refers to a personal state in which social cohesion is minimal or non-existent. The Purpose in Life Test, two anomie scales, and the California Psychological Inventory (CPI) were administered to 222 subjects consisting of graduate students in religion, graduate psychology students, engineers, ghetto residents, and inhabitants of a rural commune. The Purpose in Life Test did not correlate with either the anomie scales or the CPI.

Frankl (1955) has theorized that sexual frustration may be a manifestation of more general existential frustration. Sallee and Casciani (1976) investigated the relationship between one's sense of purpose in life and the sexual attitudes and behavior of college students. Significant negative correlations were found between purpose in life scores and sexual frustration scores for males as well as for the combined group of males and females. These results support Frankl's theory relating to sexual frustration.

A key tenet of Frankl's logotherapy is the basic notion that meaning in life is enhanced as one finds meaning in suffering and death. Empirical validation was given to this notion in the research of Durlak (1972), who administered the Purpose in Life Test and Lester's Fear of Death Scale to 40 high school and 80 college students. Significant negative correlations were found between the two measures, thus supporting Frankl's view on the importance of finding meaning in suffering and death.

In an attempt to determine whether cross cultural differences exist in the area of meaning in life Dufkova and Kratochvil (1967) compared Czechoslovakian students with American students. An English summary of this research reports that the Czech students achieved significantly lower scores on the Purpose in Life Test than did the American students. The authors underscore the presence of the problem of existential frustration in Czechoslovakia. Further research is required to validate the existence of such cross cultural variations, considering that research about one year later revealed a marked decrease in the measure of existential vacuum as experienced by the same Czech students. Frankl (1975) contends that during this year the

students, by participating in the Dubcek liberalization movement, had found meaningfulness in a cause for which to live, to fight, and unfortunately also for which to die.

The Purpose in Life Test purports to discriminate between psychiatric patients and the non-patient population (Crumbaugh, 1968). A study in India (Chaudary and Sharma, 1976) supports this contention. The Purpose in Life Test was administered to 60 schizophrenic, 60 neurotic and 60 normal males matched for age (18-32 years), education and socio-economic background. Results indicated that normal subjects differed significantly from schizophrenic and neurotic subjects on meaning in life scores as did the scores of neurotic subjects from those of the schizophrenics.

Frankl (1975) asserts that there is no doubt that existential vacuum is increasing. This sense of emptiness, of meaninglessness, this feeling of futility, of existential frustration at present plays at least as important a role as did the feeling of inferiority in Alfred Adler's time. Frankl (1975) reports that the incidence of existential vacuum among 500 Viennese youth had increased from 30 to 80 per cent within the two previous years. Klitzke (1969) has noted the spread of existential vacuum in Africa, especially among the academic youth. That the existential vacuum is passing the borders between capitalist and communist countries "without a visa" has been aptly described by Vymetal (1966).

Frankl (1975) contrasts the 25 per cent of his European students who have experienced existential vacuum with the 60 per cent of his United States students who reported such an experience. He contends that existential vacuum is more manifest in North America than it is in

Europe, a situation which he attributes to the North American reductionistic view of man.

Young people who are caught in the existential vacuum tend to substitute feelings of meaningfulness for true meanings. Excessive use of drugs and alcohol, sexual promiscuity, as well as aggression and violence tend to be efforts to find meaning. Frankl (1975) has referred to the mass neurotic triad of depression, addiction and aggression as effects of the existential vacuum. Reference has previously been made to the studies of Grollman (1974) on the relationship between a lack of life meaning and depression which results in suicide.

Among the research related to the use of drugs and life meaning is that of Shean and Fechtman (1971). They report that significantly lower ($p < .001$) purpose in life scores were obtained on the Purpose in Life Test by students who had smoked marijuana regularly over a six month period as compared to nonusers.

A growing body of statistical evidence lends support to the hypothesis noted by Frankl (1975) that people are most likely to become aggressive when they perceive their lives to be empty and meaningless. Black and Gregson (1973) report a study comparing first-sentence prisoners, recidivists and normals, concluding that criminality and purpose in life are inversely related. Of growing interest is the use of logotherapy in the treatment of juvenile delinquents. Frankl (1975) cites the success of Dr. L.S. Barber in the United States, reporting a recidivism rate of less than 17 per cent as compared to the 40 per cent average with other methods.

Adolescent Valuing

Although the matrix of the adolescent valuing system appears

multi-dimensional, certain influences on the valuing processes of adolescents are noteworthy for the purposes of this thesis. Studies on the importance of parents in determining adolescent values have demonstrated a high correlation between parental and adolescent values (Reiss, 1966; Munns, 1972; Coady, 1973; Marvell, 1974). In general, the values of the adolescent, including religious values, correspond to those values held by their parents. However, the influence of the peer group is considerable precisely in those areas relating to the acceptance of the individual and his status within the group. That the peer group reinforces and influences the values of its members has been illustrated by Dunphy (1963). Whether, in practice, adolescents behave as they verbally affirm in relation to adult values has been challenged by Remmers and Radler (1957). Questionnaire results revealed frequent behavior modelled on that accepted by peers, for example, the practice of smoking despite value affirmations to the contrary. Light (1970) reports highly significant differences between rural and urban girls in their attitudes toward religion, family, morality, premarital sex and education. Family and religion have a greater influence upon rural than upon urban girls. The new morality rather than the conventional ethical standards tends to be accepted more often by urban girls as compared to their rural counterparts. The peer group orientation of adolescence, as a strong social influence unmatched in any other stage of human development (Mitchell, 1974), coupled with a growing ability for abstract thinking, including religious thinking (Peatling, 1974), must not be deemphasized in relation to adolescent life values.

Sexual differences in valuing have also been noted. Wright and

Cox (1967) observed that the judgments of right and wrong made by girls tended to be more severe than those made by boys. Boys tend to become involved in more antisocial and deviant behavior, as is evident in many studies on juvenile delinquency, although the preponderance of boys is probably based on cultural factors. Rokeach (1968, 1973) in his notable research on terminal and instrumental values, concluded that females place a higher value on love, affiliation and family, whereas males value achievement and intellectual pursuits more highly. Again the influence of socialization and role conditioning is probably a contributing factor to such differences. Rokeach identifies salvation as that value most related to a perceived importance of religion, with females valuing salvation significantly more highly than do males.

Adolescent valuing is related to religious training. That there is a high correlation between religiosity and self-concept has been demonstrated in studies by Strunk (1958). Self-report techniques, used to measure self-concept, revealed more positive scores for individuals who also had achieved high religiosity scores. Wright and Cox (1967) support the positive correlation between religious beliefs and strictness of moral judgment.

The question of value differences between students in Catholic schools and those in public schools is of interest. Fichter (1958) in an Indiana study, found few value differences between the two groups. In a study of the effects of denominational education in high school and college, Greeley (1963), reports the following results between Catholics from denominational colleges and Catholics from other schools: moderate differences in Church attendance and in expectations of life happiness but little difference in career plans and occupational

values.

Currie (1973) suggests that the role of religion as a relevant factor in the lives of youth is difficult to assess. In a study of Calgary youth, 82 per cent of those who scored high on a search for ultimate meaning recognized the need for religion in their lives. However, only 25 per cent of those who agreed or strongly agreed that they needed a religious orientation scored high on search for ultimate meaning. Only 20 per cent of the respondents affirmed that religion now has a strong influence in their lives, whereas 50 per cent expressed a need for some form of religious orientation.

Religious Meaning

Religion has been variously defined throughout the ages. With particular reference to this study, certain definitions are noteworthy. It was Albert Einstein's contention that to be religious is to have found an answer to the question "What is the meaning of life?" (Frankl, 1975). For Frankl (1975), religion is specifically "man's search for ultimate meaning". Belief and faith, then, become man's trust in ultimate meaning. For Frankl, the religious dimension, in its human aspect is accessible to psychological exploration. Man's search for meaning is the one dimension of uniquely human phenomena that is most representative of human reality. For Tillich (1956), matters of ultimate meaning or ultimate concern will be regarded as sacred in that they symbolize solutions to questions of ultimate meaning.

Yinger (1970) further stresses the idea that the religious person is concerned with finding ultimate meaning in life; religion then, consists of that system of beliefs and practices by means of which a group of people struggles with ultimate life problems.

Viewing religion from a social-scientific perspective, Glock and Stark (1965), have postulated five core dimensions of religiosity as a method for ordering the many and diverse manifestations of religion. The five dimensions or signs of individual religious behavior consist of the experiential, the ritualistic, the ideological, the intellectual and the consequential.

The experiential dimension encompasses the subjective religious experiences, feelings, perceptions, and sensations relating to communication with a divine essence. That individuals will experience some religious emotion is accepted by all religions although the propriety, emphasis and extent of such experiences varies widely. Whether these experiences be mystical, conversion related, peaceful, terrorful or passionately unifying, religious feeling comprises an essential dimension of religiosity.

The ideological dimension refers to the set of beliefs to which the religious person is expected to adhere. Doctrinal formulations for the existence and character of the divine, explanations of divine purpose and man's role with regard to that purpose, as well as ethical beliefs defining the proper conduct of man toward God and fellow man would be included in the ideological dimension. Variation within the content and scope of such beliefs occur within particular religious traditions as well as among different religions.

The specifically religious practices expected of the religious person constitute the ritualistic dimension. Individual and group worship, prayer, fasting, sacramental participation and other ritualistic activities make up this category.

The intellectual dimension refers to the information and knowledge

expected of religious adherents, be it knowledge of the basic faith propositions, scriptural meanings or general religious information. Glock and Stark (1965) affirm the relationship between the ideological dimensions and the intellectual dimensions. "Although knowledge of a belief is a pre-condition for its acceptance, belief is not a necessary consequence of knowledge nor does all religious knowledge bear on belief" (p. 21).

The fifth dimension, that of the consequential, constitutes the religious consequences and religious prescriptions outlining what adherents ought to do, what work they are to perform, what attitudes they are to hold, and how man is to relate to his fellow man. The consequential dimension is different in kind from the other four dimensions: it encompasses the secular effects of believing, practising, experiencing and knowing within the context of a religious commitment.

These five dimensions, provide a multidimensional frame of reference for assessing religiosity. Such a typology serves as a schema around which systematic data can be aggregated and comparisons made. This multidimensional approach will constitute the functional definition of religiosity employed for the purposes of this thesis. It serves to define more accurately the concept of religion than does a unilateral approach utilizing only single indicators such as church attendance, belief in God or salvation. Smart (1968), provides a similar multidimensional approach, delineating six common formal characteristics of religion: doctrines, myths, ethics, rites, experiences, and socialization.

Stark and Glock (1968) report a major study of three thousand persons in four counties of Northern California. Self-administered

mail questionnaires were used to collect the data based on a random sample of the Church member population. Responses to the items assessing the dimensions of religious commitment, indicated that 70 per cent of the Catholics attended church once a week or oftener. Another study by Greeley and Rossi (1966) had assessed similar dimensions of religiosity noting a weekly attendance of 86 per cent.

Numerous research projects have subsequently been based on the Glock and Stark model. Weigert and Thomas (1970) in a cross cultural study of male and female high school students in five societies, utilized a religiosity scale with items taken from Glock and Stark (1965) with minor modifications. Items assessing religious knowledge were modified for greater applicability to Catholic respondents and items assessing the consequential dimension were added. In this study, belief emerged as the single best indicator of religiosity, with knowledge most consistently least important.

Development of Adolescent Religious Identity and Commitment

The question of how young people develop their religious attitudes and beliefs is an area related to the central purpose of this thesis. Studies of aspects of socialization have underscored the various processes at work. Erikson (1968) delineates the various stages preceding adolescent religious development. During the child's infancy and latency period, religion is intimately connected to the parent-child primordial ties. With the emergence of the autonomous self during the early adolescent years, religious experience becomes related to the search for identity. With later adolescence, Erikson notes that an "ideology" tends to develop which encompasses the meaning of the life-goals held by the young adult. During this period religion may

become the focus of such an ideological structure.

To Erikson (1968) the search for identity, concerns for life goals and the general search for meaning become the existential problems requiring such an ideological structure:

It is in adolescence, that the ideological structure of the environment becomes essential for the ego, because without an ideological simplification of the universe, the adolescent ego cannot experience according to its specific capacities and its expanding involvement (p. 27).

The adolescent identity formation and identity crises are further described by Erikson (1956) who states that:

Adolescence can be viewed as a psychological moratorium during which the individual through free role experimentation may find a niche in some section of his society, a niche which is firmly defined and yet seems to be uniquely made for him. In finding it, the young adult gains an assured sense of inner continuity and social sameness which will bridge what he was as a child and what he is about to become, and will reconcile his conception of himself and his community's recognition of him ... Identity formation, finally begins where the usefulness of identification ends. It arises from the selective repudiation and mutual assimilation of childhood identifications, and their absorption in a new configuration which, in turn, is dependent on the process by which a society ... identifies the young individual, recognizing him as somebody who had to become the way he is, and who, being the way he is, is taken for granted.

Identity diffusion results when the adolescent is unable to integrate his identity into a cohesive part of his personality. Though a normal teenage condition, when this identity diffusion becomes acute, it may become pathological. Erikson describes the attendant incapacities for personal intimacy, diffusion of time perspective, diffusion of industry and the possible choice of a negative identity.

Adolescent religious development has been described by Argyle (1958). In a summary of research, he notes that the adolescent experiences a period of intellectual doubts at approximately the mental age of twelve years which period precedes one of emotional stress. This description concurs with Erikson's notion of the search for identity and attendant identity confusion. Argyle suggests that these conflicts appear to be resolved by the age of sixteen years. Such resolution means either a commitment to religion or an abandonment of the religion of childhood with a possible substitution of another ideological structure. Allport (1950) has described adolescence as a period of development when youth is compelled to transform all his attitudes, including his religious attitudes, from "second-hand fittings to first-hand fittings of his personality" (p. 36). A common feeling is the experience of alienation from parent and church. Allport's assessment holds true almost thirty years later.

Questions of meaning and purpose in life continue to challenge the adolescent. Goldman (1964) has observed that the adolescent is at a time of his life when real religious insights become possible and also at a stage when there is a strong tendency for negative attitudes to arise. When religion is seen as an ideological structure based upon authoritarianism, irrational belief and ethical dictates, the adolescent is doubly challenged in his struggle to become an independent adult. Particularly in times of ideological confusion and widespread marginality of identity and role descriptions (Erikson, 1963), youth searches for something and somebody to be true to, such pursuits often hidden in a bewildering combination of shifting devotion and sudden perversity. Before settling on a considered cause or commitment, youth must often

test extremes in his search for that meaning which best meets man's need for shared sameness with one community and a personal self sameness. Congruent with the Piagetian concept of the attainment of formal operations and abstract thinking, the young person is able to operate on hypothetical propositions with possible variables and potential relations as he must make a series of selections of personal, occupational, sexual and ideological commitments (Erikson, 1963). It follows that youth, in its psychosocial development, holds a distinctive place within the framework of man's search for meaning.

CHAPTER III

METHODOLOGY AND RESEARCH PROCEDURES

Description of Sample

The sample of this study consisted of 235 students in grades X, XI and XII from two schools in the Edmonton Catholic School System. St. Francis Xavier and Louis St. Laurent Schools were selected on the basis of relative similarity of socio-economic status. Subjects consisted of a cross-section of students, male and female, enrolled in classes at each of the two schools involved. An attempt was made to obtain approximately equal numbers of students in each of the three grade levels. Tables I-II contain the relevant sample statistics.

Subjects were asked to respond anonymously to each of the three tests administered to them in a group setting. No further instructions were presented other than those written as the instructions on each test (see Appendices A to C). No subjects refused the invitations to respond to the tests and approximately one hour was allotted during which time all students were able to complete the tests. Subjects were asked to provide the following demographical data: sex, age, years in attendance in Catholic schools, whether or not mother and father are Catholic, and degree of present religious influence on mother and father. For the purposes of this study, only schools within the Catholic school system were chosen in an attempt to control for denominational variables. In addition, due to the personal nature of the subject matter of the study requiring information regarding subjects' religious beliefs and practices, it was decided to restrict the sample to students in the Catholic school system. It was recognized that students currently in Grade XII would probably have studied the meaning in life theme contained in the

TABLE I
SAMPLE CHARACTERISTICS

	St. Francis Xavier	Louis St. Laurent	Age (Percents)				Background in Catholic Schools (Percents)				
			16	17	18	19-20	Gr.1-12	Gr.7-12	Gr.9-12	Gr.10-12	Gr.12 Only
Male	68	47	58.3	28.7	13.0	0	88.7	7.0	2.6	1.7	0
Female	78	42	60.5	30.3	7.6	1.6	94.1	3.4	0.0	1.7	0.8
Total	146	89									

CATHOLIC PARENTS (Percents)		
	FATHERS	MOTHERS
Male	84.3	87.8
Female	84.0	91.6

TABLE II
PERCENTS REPORTING INFLUENCE OF RELIGION ON PARENTS

	FATHER		MOTHER	
	M	F	M	F
1. Very strong	5.2	13.6	11.6	21.2
2. Quite strong	16.5	17.8	24.1	19.5
3. Strong	18.3	21.2	29.5	28.0
4. Slight	46.1	32.2	32.1	25.4
5. None	13.9	15.3	2.7	5.9

Religious Studies 25 program.

Research Instruments

For the purposes of this study, the following three research instruments were employed: (1) the Purpose in Life Test, Crumbaugh and Maholick, 1968 (see Appendix B); (b) the Seeking of Noetic Goals Test, Crumbaugh, 1977 (see Appendix A); (c) a Religious Commitment Scale, Weigert and Thomas, 1970, modified form based on Glock and Stark, 1965 (see Appendix C).

These instruments were selected because of their empirical validation of the basic meaning in life and existential vacuum constructs as well as the multi-dimensional approach to religiosity deemed suitable for the purposes of this study.

The three research instruments will be discussed in detail in this chapter.

The Purpose in Life Test

The first instrument used in this study is the Purpose in Life Test (PIL) developed by Crumbaugh and Maholick (1968), as an attitude scale based on the tenets of Frankl's theory of logotherapy. Specifically, it is designed to measure the degree to which meaning in life has been found and the existential vacuum which results when meaning has not been discovered.

The PIL test has been employed with students in the context of individual counselling, vocational guidance and rehabilitation work. It has also proved useful in the treatment of both in-and out-patient neurotics, alcoholics, and has been employed with handicapped and elderly persons.

Group administration of the PIL has provided valuable research

findings (see Chapter II) in relation to the degree of meaning in life of various populations (i.e. Crumbaugh and Maholick, 1964; Crumbaugh, 1968).

The PIL is comprised of three parts: Part A, consisting of 20 statements requiring responses cast in a Likert-type 7-point scale format, ranging from "never" to "constantly"; Part B, comprised of 13 sentence completion items, and Part C, consisting of an assigned paragraph requiring the subject to detail his aims, ambitions and life goals. It should be noted that Part A is the only portion of the PIL that is objectively scored and will be used in the data analysis of this research project. A subjective interpretation of Parts B and C will serve to support the findings reported in the objective analysis.

In determining the reliability of the PIL, Crumbaugh and Maholick (1964) report a split-half (odd-even) reliability coefficient of .81 (Pearson Product-Moment, $N=225$), Spearman-Brown corrected to .90. A similar relationship reported by Crumbaugh (1968a) gives a reliability coefficient of .85 (Pearson Product-Moment, $N=120$), Spearman-Brown corrected to .92.

The construct and criterion (concurrent) validities of the PIL have also been determined by Crumbaugh (1968). With reference to construct validity, he correctly predicted the order to means of four "normal" populations in descending order: successful business and professional personnel, active and leading Protestant parishioners, college undergraduates, and indigent nonpsychiatric hospital patients. Although Crumbaugh reports that the order of means for psychiatric populations was predicted less accurately, the expected decreasing order from neurotics to alcoholics to nonschizophrenic psychotics was

correctly predicted. A predicted difference between patient and non-patient populations was also obtained (see PIL Manual of Instructions). Thus, the construct validity for the PIL seems supported by such findings and in accord with logotherapeutic constructs.

In reference to the concurrent or criterion validity of the PIL, correlations were obtained between PIL scores and the ratings of therapists and church ministers. The following relationships obtained: .38 (Pearson Product-Moment, $N=50$) between the PIL score and therapists' ratings; .47 (Pearson Product-Moment, $N=120$) between the PIL score and the ministers' ratings. Crumbaugh and Maholick (1960) note that such results are in line with the level of criterion validity obtainable from a single measure of a complex trait.

The PIL Manual further attests to the relationship of the PIL scores to other variables. Crumbaugh and Maholick (1964) found no significant relationship between the PIL and any of the six scales of the Allport-Vernon-Lindsay Scale of values. The two authors also report a relationship of .68 (Pearson Product-Moment, $N=136$) between the PIL and a questionnaire devised by Frankl to estimate the presence of existential vacuum. Crumbaugh (1968a) found a significant negative correlation between the PIL and the Srole Anomie Scale. Significant positive relationships were reported by Nyholm (1966) between the PIL and four scales of the California Personality Inventory: self-acceptance, sense of well-being, achievement via conformance, and psychological mindedness. Relationships were also determined by Crumbaugh and Maholick (1964) between scales of the Minnesota Multiphasic Personality Inventory and the PIL, including a correlation of $-.30$ (Pearson Product-Moment, $N=45$) for the D (Depression) scale, which Crumbaugh (1968a) found to be $-.65$

(Pearson Product-Moment).

The authors of the PIL conclude that the high relationship between the PIL and Frankl's questionnaire as well as the highly significant separation of patient from non-patient populations suggest that the PIL does measure, as intended, a new factor (existential vacuum), which is the essential ingredient of a newly identified neurosis (Noogenic neurosis).

Scoring of the PIL (Part A) is a simple numerical sum of the circled responses for the 20 items. For purposes of interpretation, raw scores above 112 are considered to indicate the presence of definite purpose and meaning in life whereas scores below 92 indicate a lack of clear meaning and purpose. Raw scores from 92 through 112 are in the indecisive range. Crumbaugh (1968) reports a mean score of 102 with a standard deviation of 19, based on 1,151 cases.

The Seeking of Noetic Goals Test

The second research instrument employed in this study is the Seeking of Noetic Goals Test (SONG), which is a complementary scale to the Purpose in Life Test. It has been designed by Crumbaugh (1977) to measure the strength of motivation to find life meaning and thus is also an attitude scale based on the system of logotherapy developed by Viktor Frankl.

The SONG consists of 20 statements requiring responses on a 7-point continuum of quantitative differentiations ranging from "never" to "constantly". The statements refer to the degree of strength or lack of motivation to find satisfactory lifemeanings considering such aspects as restlessness, excitement, worthwhileness, ultimate meaning and goal achievement (see Appendix A).

In an effort to break up possible response sets, some of the items are constructed with reversal of the order of the quantitative responses. Scoring consists in summing the numerical responses chosen by the respondents with the range of possible scores being from 20 to 140.

Combined use of The Purpose in Life Test and The Seeking of Noetic Goals Test should provide significant measures not only on the extent of life meanings but also on the strength of motivation to find such life meaning or purpose. Subjects with high scores on the PIL test and low scores on the SONG test would tend to indicate a satisfactory life purpose and consequently a lack of motivation to find more. A low PIL test score combined with a high SONG test score would indicate a lack of life purpose, but a strong motivation to find some meaning or life purpose. Crumbaugh (1977) notes that in actual practice subjects sometimes attain low scores on both the PIL and SONG, indicating a lack of meaning as well as a lack of motivation to find it. In fact, Frankl's postulated universal need may be distorted or neutralized by a variety of factors.

The author, Crumbaugh (1977), reports a reliability coefficient for the SONG of .71 (Pearson Product-Moment, $N=158$), Spearman-Brown corrected to .83, determined by correlating the odd and even items of the scale. Consistently negative correlations between the SONG and the PIL are predicted and range from $-.27$ to $-.52$.

Construct validity, is similarly reported by Crumbaugh (1977), with evidence being the verification of the prediction that, in general, patient populations would score higher than "normal" populations ($M=73.38$, $N=206$, $SD=14.2$). This prediction was based on the theory that mental and emotional illness tends to destroy meaning and purpose in

life thereby increasing the need to find it. The difference between the mean of "normals" and "abnormals" is in the predicted direction, with a normative cutting score of 79, the midpoint between the means of 73 for "normal" and 85 for "abnormal" populations. This score is highly statistically significant ($p < .000001$), and confirms the hypothesis.

Further information supporting the validity of the SONG, especially when measures are taken posttherapeutically, may be found in Crumbaugh (1977). In general, the SONG, when used in conjunction with the PIL, serves as a useful complementary tool especially to determine the probability of as well as resultant success of logotherapeutic techniques.

Dimensions of Religious Commitment

The third instrument used in this research is a Dimensions of Religious Commitment Scale which consists of basic items derived from Glock and Stark (1965), with modification for Catholic respondents made by Weigert and Thomas (1970). The Scale measures the five dimensions of religious commitment contained in the Glock and Stark (1965) definition of religion: belief, practice, experience, knowledge and consequences. (See Chapter II for descriptive details on these five dimensions). The Weigert and Thomas Revision of the Scale is employed because of its greater applicability to Catholic respondents. In effect, the Glock and Stark items are utilized with revisions of the knowledge items and the addition of items assessing the consequential dimension.

The six knowledge items (Table VIII) were selected as being more relevant to Catholic samples than those presented by Stark and Glock (1968). Three consequential items relating to conformity to the wishes

of the priest were also added, considering that for Catholics the priest has traditionally been regarded as a legitimate extension of the authority of the Church (Weigert and Thomas, 1970). A fourth consequential item was inserted to assess certitude of life meaning which results from commitment to a traditional religious ideology and institution (Table XIII).

This religious commitment scale consists of 27 multiple choice items operationalizing the dimensions of religiosity as well as seven questions requiring demographic information as to the respondent's sex, age, religious commitment of parents and Catholic school attendance. Categorization of the 27 items according to each of the five dimensions of religious commitment is presented in Chapter IV (Tables VIII to XIII).

The importance of verifying whether or not the theoretically derived dimensions of religiosity are empirically distinct has been underscored by Stark and Glock (1968). Weigert and Thomas (1974) provide a table of correlations indicating that the dimensions are relatively independent. With one exception, the correlations, measured by Pearson r , are less than .58. Except for one sample, there are only three correlations above .49. The knowledge dimension is least related to the other dimensions and occasionally shifts direction becoming negatively related.

Inter-scale correlations are similarly provided in tabular form by Weigert and Thomas (1974) with results compared to the Stark and Glock (1968) findings on belief, experience, knowledge and practice. With one exception, the ranking of the inter-scale correlations for adolescent samples are to a high degree positively correlated with the Stark and Glock samples for both Catholic and Protestant adults (Average Spearman

$r = 1.00$ for males and $.89$ for females).

Hypotheses

The foregoing chapters have provided the background to the major concerns of this research study. The basic dimensions of logotherapy as well as adolescent religiosity and valuing have been outlined with empirical evidence presented. Descriptions of the sample and the research instruments have also been presented.

Analysis of the research data of this study led to the acceptance or rejection of the following hypotheses:

Hypothesis I:

There will be a positive correlation between meaning in life as measured by the Purpose in Life Test and religiosity as measured by the Dimensions of Religious Commitment Scale.

Hypothesis II:

There will be a negative correlation between scores on the Purpose in Life Test and scores on the Seeking of Noetic Goals Test.

Hypothesis III:

There will be a significant difference between the scores of male and female subjects and their religiosity as measured by the Dimensions of Religious Commitment Scale.

Hypothesis IV:

No significant difference will be found between males and females in experiencing satisfactory life meaning as measured by the Purpose in Life Test.

Hypothesis V:

There will be a significant difference between subjects who have Catholic parents and those who do not in the experiencing of satisfactory life meaning as reported on the PIL.

Hypothesis VI:

A significant positive correlation will be found between the influence of religion on parents as reported by subjects and life meaning scores as reported on the PIL.

Hypothesis VII:

There will be a positive correlation between belief, as measured on the Dimensions of Religious Commitment Scale, and meaning in life as measured by the PIL.

Hypothesis VIII:

A significant positive correlation will be found between age and meaning in life as measured by the PIL.

Hypothesis IX:

There will be a negative correlation between the age of the subjects and religiosity as measured by the Dimensions of Religious Commitment Scale.

Factor Analysis

An analysis of the internal structure of the Purpose in Life Test and the Seeking of Noetic Goals Test was carried out and becomes a secondary focus of this study. Due to lack of available empirical evidence, no hypotheses were made relating to the internal structure of the tests.

Analysis of Data

For the descriptive section of this study, the Statistical Package for the Social Sciences (SPSS), Subprogram "Crosstabs" by Nie et al (1975) was used to determine the percentage responses for males and females for the three instruments employed. Comparisons were made with available data from related New York and St. Paul, U.S.A. samples (Weigert and Thomas, 1974).

The correlational section of the study was undertaken by utilizing the Desto 2 program, University of Alberta. Correlations were calculated on mean scores on the fourteen variables tested from the three research instruments. Significance of the correlations was established by use of t-tests (Ferguson, 1971).

The ANOV 10 program, University of Alberta, was employed to determine group mean differences between males and females, and between Catholic and non-Catholic parents. "T-tests" were run on the group mean scores for the variables tested and "F-tests" were used to check for differences between variances (Ferguson, 1971).

A factor analysis was performed on the Purpose in Life Test and the Seeking of Noetic Goals Test to determine the underlying factor structure of the tests. A Principal Component Analysis was first conducted, then the resulting principal factors were used as reference axes for rotation by the Varimax method (Kaiser, 1958). The "Fact 18" program, University of Alberta, was utilized for the factor analysis.

All the analyses were undertaken at the Department of Educational Research Services (DERS), University of Alberta. The programs were run on an AMDAHL-470-V-6 computer.

CHAPTER IV

INTERPRETATION OF DATA

Interpretation of the data of this study of the relationship between purpose in life and religiosity will comprise three sections. Firstly, the central hypotheses of the thesis will be confirmed or rejected on the basis of the data provided. Secondly, reference will be made to specific items of the three instruments employed in the study, with percentage responses for males and females presented. Thirdly, a component analysis of the Purpose in Life Test and the Seeking of Noetic Goals Test will be outlined in an attempt to delineate common factors inherent in the meaning in life construct.

Discussion of Hypotheses

Hypothesis I.

Hypothesis I stated that subjects who have found meaning and purpose in life would also have a high degree of religiosity. This hypothesis was confirmed (see Table III). The correlation between meaning in life and religiosity was .20, significant at the .01 level. Although $r=.20$ is not a high correlation, it does tend to indicate that the students who report that they have found meaning in life also report a higher degree of religious commitment than those who do not.

The results confirming Hypothesis I are consistent with the theoretical convictions of Frankl (1965, 1975) and Crumbaugh et al (1970) that intrinsic religion in its genuine sense may facilitate greater perceived meaning in life. The findings also support the research of Crandall and Rasmussen (1975) on the correlation between perceived purpose in life and an intrinsic religious orientation.

Table III
Correlations Matrix (Pearson Product-Moment)

	SONG	PIL	BELIEF	BELIEF & ETHICS	ETHICS	EXPERIENCE	PRACTICE	KNOWLEDGE	CONSEQUENTIAL	TOTAL RELIGIOSITY	AGE	BACKGROUND IN CATH. SCHOOLS	INFLUENCE OF RELIGION ON FATHER	INFLUENCE OF RELIGION ON MOTHER
SONG	1.00													
PIL	-0.26***	1.00												
BELIEF	-0.00	0.15*	1.00											
BELIEF & ETHICS	0.01	0.15*	0.93***	1.00										
ETHICS	0.03	0.12	0.49***	0.77***	1.00									
EXPERIENCE	0.18**	0.11	0.52***	0.56***	0.44***	1.00								
PRACTICE	0.10	0.13*	0.46***	0.46***	0.30***	0.32***	1.00							
KNOWLEDGE	-0.02	0.07	0.16**	0.15*	0.08	0.09	0.07	1.00						
CONSEQUENTIAL	0.08	0.25***	0.33***	0.34***	0.23***	0.36***	0.19**	0.06	1.00					
RELIGIOSITY TOTAL	0.11	0.20**	0.83***	0.87***	0.65***	0.74***	0.75***	0.22**	0.47***	1.00				
AGE	-0.03	0.03	-0.10	-0.12	-0.11	-0.10	-0.11	-0.02	0.00	-0.13*	1.00			
BACKGROUND IN CATH. SCHOOLS	0.03	-0.04	0.01	0.01	0.01	0.09	0.08	0.02	-0.06	0.06	-0.04	1.00		
INFLUENCE OF RELIGION ON FATHER	0.11	0.06	0.25***	0.27***	0.21**	0.27***	0.46***	0.07	0.26***	0.43***	-0.02	0.09	1.00	
INFLUENCE OF RELIGION ON MOTHER	0.09	0.18**	0.24***	0.25***	0.19**	0.29***	0.49***	0.06	0.25***	0.43***	-0.03	0.03	0.52***	1.00

* $p < .05$ ** $p < .01$ *** $p < .001$

The question of cause and effect remains: do young people find purpose from their religion or does a purpose in life attract young people towards religion?

Hypothesis II

Hypothesis II was derived from the essential nature of the PIL and the SONG. One would expect to find a negative correlation between having a purpose in life and feeling motivated to find meaning. In general once meaning and purpose in life have been discovered, the motivation to find them is minimized. A negative correlation of $-.26$, significant at the $.001$ level (see Table III) strongly supported this hypothesis. This finding concurs with that of Crumbaugh as reported in the Manual of Instructions for the SONG (1977).

Hypothesis III

The significance of the difference between male and female subjects on the total religiosity score was tested using ANOV 10 (Table IV). The boys' mean score was 63.90 and the girls' 66.50, a difference of 2.6, significant at the $.05$ level. The girls tested, scored significantly higher on what the Glock and Stark scale measures as "religiosity". Thus the hypothesis of a significant difference between males and females on religiosity was supported and in the direction of greater religiosity in the female group. To better understand the significance of this difference and the nature of "religiosity" in this context, it is interesting to look, too, at the relationship of the sex of the subjects with one element of the Religious Dimensions Scale — "consequentiality" (Table IV). This factor measures willingness to accept the directives of religious authorities such as priests. Here the girls showed them-

selves much more submissive than boys. Out of a possible total of 11 points on this item (a higher score showing a higher degree of conformity) the girls' mean score was 7.08, and the boys' 6.63, a difference of 0.45, significant at the .01 level. The girls, then, are a distinctly more conformist group when it comes to religious authority. This may tell us something not only about the characteristics females bring to their religious affiliation, but also about the concept of religiosity that the Religious Dimensions Scale is measuring. The significant findings of Hypothesis III give rise to the traditional question of whether females are generally more "religious" or whether traditional religion tends to incorporate more characteristics that appeal to females than to males.

The findings relating to Hypothesis III, lend support to results obtained by Rokeach (1968, 1973), who found that females value salvation significantly more highly than do males. Salvation was identified as that value on the Rokeach Value Survey which was most related to the subject's perceived importance of religion.

Hypothesis IV

This hypothesis explored the possibility that there is a significant difference between males and females in the degree to which they have found meaning in life. Crumbaugh has reported in the manual for the PIL (Crumbaugh, 1969) that research has not indicated any significant differences between males and females in the populations he tested, and the findings of the present study of a totally adolescent sample are consistent with research on the general population. As hypothesized, no significant difference was found between the mean scores of the two

TABLE IV
COMPARISON OF SELECTED GROUP MEAN SCORES

	MALE (n=115)		FEMALE (n=120)		df	T	P(one-tail)
	\bar{x}	σ	\bar{x}	σ			
Purpose in Life	99.17	14.63	98.92	13.32	233	0.136	0.446
Religiosity	63.90	10.88	66.51	10.31	233	-1.88	0.030*
Consequential	6.63	1.30	7.08	1.34	233	-2.559	0.006**

	CATHOLIC FATHERS		NON-CATHOLIC FATHERS		df	T	P(one-tail)
	\bar{x}	σ	\bar{x}	σ			
Purpose in Life	99.33	13.92	96.52	13.08	230	1.179	0.120

	CATHOLIC MOTHERS		NON-CATHOLIC MOTHERS		df	T	p(one-tail)
	\bar{x}	σ	\bar{x}	σ			
Purpose in Life	99.14	14.28	99.28	9.46	227	-0.040	0.484

* $p < .05$

** $p < .01$

groups in this study, in which the boys achieved a mean score of 99.17, while the girls' mean score was 98.92, a very small and non-significant difference of only .25 (Table IV). This finding also supports the results of no differences in PIL scores between males and females as noted by Meir and Edwards (1974).

Hypothesis V

This hypothesis, looking for a significant relationship between the experience of satisfactory life meaning and the Catholicism of the parents was not supported. There was no significant relationship between high scores on the PIL and the fact that the students' parents were Catholic. In a breakdown of this data between mothers and fathers, the Catholicism of neither mother nor father had any significant relationship to PIL scores. There was a difference of 3.15 points on the PIL between those subjects who had Catholic fathers and those who did not, and a difference in mean scores of only .13 between those who had Catholic mothers and those who did not (Table IV).

This apparent lack of relationship between parents' religious affiliation toward Catholicism and their childrens' attainment of satisfactory life meanings is especially thought provoking when we look at the influence of religion in general on the parents as reported by their children. This is presented in the findings related to the next hypothesis.

Hypothesis VI

The findings supported this hypothesis which maintained that there is a positive relationship between the degree to which the young people tested had discovered meaning in life and the influence of religion on

their parents. Interestingly, the relationship was significantly positive only for the mother. The influence of religion on the father does not seem to have any significant relationship to the discovery of meaning in life of their children ($r=.03$). But the influence of religion on the mother has a stronger positive relationship ($r=.18$) which is significant at the .01 level.

This finding that the perceived religiosity of the mother seems to have more bearing on the child's discovery of life meaning may give rise to some speculation about child rearing practices in our society. Is it true that women take the major responsibility in the home for the total moral and religious upbringing of the children? It would seem not in the light of the present findings (Table III) where the influence of religion on the father has exactly the same high positive correlation with total religiosity ($r=.43$) as does the influence of religion on the mother. There would seem to be some difference between the father's total religious influence and his influence on the child in the discovery of life meaning.

Hypothesis VII

The predicted positive correlation between belief and meaning in life (PIL) was supported by the findings. The two factors correlated .15 which is significant at the .05 level (Table III). "Belief" was singled out for special attention in this study because, according to Stark and Glock (1968), Weigert and Thomas (1974), it is the single best measure of religiosity. The present study would seem to support this, too, since a correlation of .83 was found between belief and the total religiosity score (Table III). It should be noted here, however, that as Currie observed (1973), the Glock and Stark scale tends to

reward what we may call "fundamentalist" views such as a literal interpretation of the Bible and absolute certainty regarding the existence of God, the divinity of Christ, miracles and the existence of the devil. Doubts or questioning of religious belief get low scores on the Glock and Stark weighting system for subjects' responses. Considering the normal search for identity of the teenage sample comprising this study; the current age of questioning of traditional beliefs, values and the institutions; as well as post Vatican II emphasis for Catholics on the importance of questioning as part of religious development, one would expect a low positive correlation between belief as measured in this study and meaning in life.

Hypothesis VIII

The hypothesized positive correlation between age and the degree to which subjects had discovered meaning in life was not supported. This could be explained by the relatively small age differential within the sample, ranging from 16 years to 19 years (Table I). This lack of any significant change in life meanings or the need for life meanings during these turbulent years of adolescence, is in itself an interesting finding and gives rise to the question of whether any three year span in the life cycle is sufficient to produce changes in life meanings in the general population.

The findings of Hypothesis VIII tend to support Crumbaugh (1969) that no consistent relationship between PIL scores and age had been reported. However, a more recent study by Meir and Edwards (1974) reported significantly lower scores on the PIL for teenage groups than for older groups. Since the latter study also found no difference between PIL scores obtained by the 13-15 year olds and the 25-35 year

olds, the findings seem somewhat inconclusive. As noted above, the question of age span and life meaning development require further research.

Hypothesis IX

The hypothesized negative correlation between age and religiosity was supported to a significant degree. The correlation between these two factors was -0.13 which is significant at the $.05$ level (Table III). In other words, the older students tended to show less "religiosity", less conformity to orthodox religion than did their younger counterparts. The eighteen year old students revealed a greater willingness to question, to refrain from giving absolute consent to traditional beliefs and practices than did their sixteen year old counterparts.

Discussion of Selected Responses

The sample mean score on the Purpose in Life Test was 99.29, with a standard deviation of 13.68. This compares with the mean score of 102 reported by Crumbaugh (1968). Forty subjects or 17 per cent of the teenagers scored above 112, indicating the presence of definite purpose and meaning in life. Fifty-four per cent obtained raw scores from 92 to 112 which places them in the indecisive range and 29 per cent scored below 92 indicating the lack of clear meaning and purpose (Crumbaugh, 1968). These findings support Frankl's estimate that existential vacuum affects in some degree more than half of the general population. The large percentage of teenagers in this study who fall in the indecisive range or below warrants careful consideration.

The sample mean score of the seeking of Noetic Goals Test was 75.82, with a standard deviation of 13.57, comparing favorably with the

TABLE V
COMPARISON OF SELECTED GROUP MEAN SCORES

	MEAN	STANDARD DEVIATION
SONG	75.82	13.57
PIL	99.29	13.68
RELIGIOSITY (total score)	65.22	10.60
RELIGIOUS BELIEF	24.47	3.59
BELIEF AND ETHICAL BELIEF	24.01	4.91
ETHICAL BELIEF	9.54	2.02
EXPERIENCE	11.85	3.08
PRACTICE	14.38	4.34
KNOWLEDGE	8.13	0.98
CONSEQUENCES	6.87	1.34
BACKGROUND IN CATHOLIC SCHOOLS	4.86	0.56
INFLUENCE OF RELIGION ON FATHER	2.69	1.21
INFLUENCE OF RELIGION ON MOTHER	3.22	1.18

general mean of 73 and standard deviation of 14 reported by Crumbaugh (1977) for normal populations.

Table V presents a listing of mean scores and standard deviations for the total Religiosity score as well as for the religious dimensions it comprises. Tables VIII to XIII provide a detailed listing of percentage responses to the items making up each religious dimension with comparisons given for the New York and St. Paul, U.S.A. samples (Weigert and Thomas, 1974). A detailed listing of percentage responses for males and females to the PIL and SONG items is given in Table VI and Table VII respectively. Although analysis of individual test items is beyond the limits of the present study, certain findings are noteworthy.

Selected response patterns on the PIL (Table VI) will be highlighted. The teenage complaint of boredom that is commonly heard today in home and educational settings would seem to be only partially verified. In response to statements relating to boredom and routine, approximately 1/3 of the students indicated that life tends to be routine and about 1/5 reported that they were usually bored. The fact that the majority of students responded more enthusiastically and excitedly about life is encouraging. More than 65 per cent of the students reported that they would feel their lives were worthwhile if they should die today. However, more than 1/2 of the students expressed uncertainty or confusion about the relationship of their lives to the world.

The question of freedom as related to high school students is also of interest. Concerning man's freedom to make his own choices, approximately 65 per cent of the males believed that man is more free than not, whereas only 42 per cent of the females responded in this way.

Table VI
PURPOSE IN LIFE RESPONSES

		Continuum of Percentage Responses						
Item		1	2	3	4	5	6	7
I am usually:	completely bored				neutral			exuberant enthusiastic
	M 0.9 F 0.8		1.7 0.8	7.8 8.3	13.9 14.2	46.1 36.7	28.7 36.7	0.9 2.5
Life to me seems:	completely routine				neutral			always exciting
	M 3.5 F 0.8		0.9 2.5	12.2 8.3	14.8 10.8	48.7 49.2	18.3 25.8	1.7 2.5
In life I have:	no goals at all				neutral			very clear goals and aims
	M 0.09 F 0.0		0.9 0.8	5.2 2.5	5.2 10.0	33.0 35.0	31.3 28.3	23.5 23.3
My personal existence is:	utterly meaningless, without purpose				neutral			very purposeful and meaningful
	M 0.9 F 0.0		0.9 0.8	2.6 6.7	19.1 12.5	38.3 35.8	24.3 28.3	13.9 15.8
Everyday is:	exactly the same				neutral			constantly new and different
	M 3.5 F 1.7		2.6 2.5	10.4 11.7	19.1 19.2	37.4 35.0	17.4 23.3	9.6 6.7

Table VI Continued ...

In thinking of my life, I:	often wonder why I exist	neutral			always see a reason for my being here
	M 8.7	5.2	13.0	20.9	9.6
	F 8.3	5.0	10.8	25.0	8.3
As I view the world in relation to my life, the world:	completely confuses me	neutral			fits meaningfully with my life
	M 6.1	5.3	21.9	21.9	2.6
	F 1.7	8.3	20.8	32.5	0.0
I am a:	very irresponsible person	neutral			very responsible person
	M 0.0	0.9	8.7	33.9	20.9
	F 0.0	0.8	8.3	34.2	18.3
Concerning man's freedom to make his own choices, I believe man is:	completely bound by limitations of heredity and environment	neutral			absolutely free to make all life choices
	M 3.5	3.5	16.7	11.4	11.4
	F 1.7	5.0	16.8	22.7	9.2
With regard to death, I am:	unprepared and frightened	neutral			prepared and unafraid
	M 7.0	2.6	18.3	23.5	7.0
	F 10.8	12.5	20.8	20.0	9.2
With regard to suicide, I have:	thought of it seriously as a way out	neutral			never given it a serious thought
	M 2.6	6.1	11.3	12.2	44.3
	F 10.0	4.2	9.2	14.2	29.2

Table VI Continued ...

I regard my ability to find a meaning, purpose or mission in life as:	practically none	neutral		very great	
	M 1.8 F 0.8	1.8 2.5	5.3 5.0	22.8 21.8	25.4 24.4
My life is:	out of my hands and controlled by external factors	neutral		in my hands and I am in control of it	
	M 3.5 F 0.8	0.0 5.0	10.4 8.3	7.8 20.8	17.4 15.8
Facing my daily tasks is:	a painful and boring experience	neutral		a source of pleasure and satisfaction	
	M 0.9 F 0.0	5.2 4.2	13.9 9.2	23.5 23.3	21.7 23.3
I have discovered:	no mission or purpose in life	neutral		clear cut goals and a satisfying life purpose	
	M 0.9 F 0.8	0.9 0.8	9.6 7.6	17.4 16.0	24.3 23.5

M = Male
F = Female

Twice as many girls as boys (22.7 per cent as compared to 11.4 per cent) selected the neutral response as regards their belief in man's freedom. The majority of teenagers in this sample agreed that they were in control of their lives rather than being controlled by external forces. More than 70 per cent of the students regarded their ability to find a meaning, purpose, or mission in life as very great. The subjective responses to Parts B and C of the PIL suggest that for a majority of the students, a satisfying career and happiness constitute their life goals.

The growing interest in the subject of death and dying and its inclusion as an area of study for high school students invites an appraisal of their attitudes towards death and suicide. With regard to death approximately 64 per cent of the females reported that they tended to be more unprepared and frightened of death than not. Considerably fewer males, approximately 41 per cent, placed themselves in this category. Regarding suicide, more females than males (10 per cent as opposed to 2.6 per cent) thought of it seriously as a way out, whereas 44 per cent of males as opposed to 29 per cent of females have never given it a second thought. The evidence for this difference is inconclusive and further study on sex differences in attitudes toward suicide is required.

As was expected, responses on the SONG test (Table VII) indicate that the majority of the teenagers reported that the greatest fulfillment of their lives lies yet in the future. Whereas 25 per cent of the females very often or constantly daydream of finding a new role and identity, only 15.7 per cent of the males do so. Fewer females than males (42.5 per cent as opposed to 54 per cent) reported that they

Table VII
Seeking of Noetic Goals Responses

Items	Percentage Responses						
	Never 1	Rarely 2	Occasionally 3	Sometimes 4	Often 5	Very Often 6	Constantly 7
I think about the ultimate meaning of life:	M 2.6 F 5.0	17.4 8.3	17.4 11.7	35.7 31.7	20.9 30.0	6.1 12.5	0.0 0.8
I have experienced the feeling that while I am destined to accomplish something important, I cannot quite put my finger on just what it is:	M 8.7 F 8.4	13.9 15.1	19.1 22.7	28.7 23.5	20.9 22.7	7.0 5.0	1.7 2.5
I try new activities or areas of interest and then these soon lost their attractiveness:	M 2.6 F 1.7	24.6 16.7	28.1 24.2	34.2 40.8	6.1 12.5	3.5 3.3	0.9 0.8
I feel that some element which I can't quite define is missing from my life:	M 9.6 F 9.2	20.0 16.7	16.5 13.3	22.6 25.0	20.9 21.7	5.2 7.5	5.2 6.7
I am restless:	M 1.7 F 0.8	14.8 14.2	22.6 21.7	27.0 26.7	19.1 23.3	10.4 10.0	4.3 3.3

M = Male
F = Female

Table VII Continued

Items	Percentage Responses						
	Never 1	Rarely 2	Occasionally 3	Sometimes 4	Often 5	Very Often 6	Constantly 7
I feel that the greatest fulfillment of my life lies yet in the future.	M 1.7	0.9	3.5	8.7	29.6	39.1	16.5
	F 0.8	4.2	5.8	17.5	24.2	28.3	19.2
I hope for something exciting in the future:	M 0.9	1.7	2.6	8.7	28.7	34.8	22.6
	F 0.0	0.8	1.7	6.7	25.8	30.0	35.0
I daydream of finding a new place for my life and a new identity:	M 8.7	29.6	10.4	21.7	13.9	6.1	9.6
	F 9.2	19.2	9.2	25.0	12.5	13.3	11.7
I feel the lack of -- and a need to find -- a real meaning and purpose in my life	M 7.8	27.8	20.0	24.3	11.3	7.0	1.7
	F 9.2	20.0	21.7	25.8	10.8	9.2	3.3
I think of achieving something new and different	M 0.9	6.1	11.3	18.3	39.1	16.5	7.8
	F 0.0	1.7	3.3	27.5	36.7	23.3	7.5

Table VII Continued ...

Items	Percentage Responses						
	Never 1	Rarely 2	Occasionally 3	Sometimes 4	Often 5	Very Often 6	Constantly 7
I seem to change my main objective in life	M 12.2 F 9.2	41.7 33.3	16.5 22.5	19.1 17.5	8.7 12.5	1.7 4.2	0.0 0.8
The mystery of life puzzles and disturbs me	M 5.2 F 5.0	22.6 23.3	21.7 16.7	26.1 30.0	13.0 15.8	5.2 5.0	6.1 4.2
I feel myself in need of a "new lease on life"	M 12.2 F 11.7	33.0 30.0	25.2 20.8	19.1 25.8	7.0 5.0	3.5 2.5	0.0 4.2
Before I achieve one goal, I start out toward a different one	M 6.1 F 5.8	27.8 30.0	23.5 15.8	27.0 30.8	12.2 11.7	2.6 3.3	0.9 2.5
I feel the need for adventure and "new worlds to conquer"	M 0.9 F 3.3	9.6 17.5	14.9 12.5	21.1 20.8	26.3 21.7	19.3 15.0	7.9 9.2

Table VII. Continued

Items	Percentage Responses						
	Never 1	Rarely 2	Occasionally 3	Sometimes 4	Often 5	Very Often 6	Constantly 7
Over my lifetime I have felt a strong urge to find myself	M 9.6 F 4.2	28.7 16.7	14.8 9.2	20.9 26.7	14.8 25.8	10.4 12.5	0.9 5.0
On occasion I have thought that I had found what I was looking for in life, only to have it vanish later	M 19.1 F 9.2	33.9 36.1	18.3 16.8	16.5 19.3	8.7 14.3	2.6 3.4	0.9 0.8
I have been aware of an all-powerful and consuming purpose toward which my life has been directed	M 17.9 F 7.8	26.8 31.3	17.0 17.4	24.1 27.8	7.1 10.4	3.6 2.6	3.6 2.6
I have sensed a lack of a worthwhile job to do in life	M 13.9 F 12.7	33.0 27.1	17.4 17.8	19.1 19.5	11.3 15.3	3.5 7.6	1.7 0.0
I have felt a determination to achieve something far beyond the ordinary	M 2.6 F 4.2	8.7 16.0	11.3 10.9	16.5 25.2	27.0 21.8	23.5 15.1	10.4 6.7

rarely or never change their main life objective. These and related findings tend to indicate that more teenage girls than boys have joined the search for identity. Influential here may be the emergence and growing acceptance of non-traditional female roles in society.

The idealism of youth is supported by these findings. Only 11.3 per cent of males and 16.2 per cent of females reported that they rarely or never have felt a determination to achieve something far beyond the ordinary. In addition, approximately 80 per cent of the young people in this study reported that occasionally or oftener they think about the ultimate meaning of life. Whereas approximately 21 per cent of the boys indicated that they were quite sure that they had not found the answers to the meaning and purpose of life only approximately 6 per cent of the girls responded in this way. Girls seemed to indicate greater uncertainty about this matter than did boys (Table VII).

Responses of the Edmonton students on the Religious Dimensions Scale (Tables VII-VIII), with comparative responses given for New York and St. Paul, U.S.A. samples are provided for reader reference. As with the PIL and SONG items, only selective responses will be noted. Consideration should be given to the fact that the comparative samples were studied some eight years previous to the 1978 Edmonton study. Consideration should also be given to the fact that the comparative samples may be dissimilar as a result of an important administrative difference. Catholic schools are state-supported in Alberta. A Catholic school education is more readily available in Alberta and is taken by virtually all Catholic students, whereas Catholic school attenders in the United States represent a minority who have deliberately chosen, usually at some cost to themselves, to have a Catholic

education.

With regard to the dimension of religious experience, strikingly fewer females in the Edmonton sample than in the comparative samples were sure that they had experienced the presence of God, salvation, punishment by God, and temptation by the devil. In fact, 24.8 per cent of the Edmonton girls, as opposed to 5 per cent of the New York girls and 9 per cent of the St. Paul girls expressed certainty that they had not been tempted by the devil. Whether this finding reflects the change in time or differing religious instruction is unclear.

The religious practice dimension also reflects some striking differences. Less frequent participation in the five religious practices comprising this dimension is evident. Again factors such as group and time differences should be considered in the interpretation of such variations. Marked differences between the Edmonton girls and girls from the other two samples in ethical beliefs, excepting that of racial discrimination, have also been noted. Only 1.7 per cent of the Edmonton girls consider practising birth control as a serious sin, whereas 16 per cent of the New York and 11 per cent of the St. Paul female samples did so. Whereas only 7.5 per cent of the Edmonton females strongly agreed that there is an afterlife in which God punishes or rewards a person for the way he lived on earth, 43 per cent of the New York and 34 per cent of the St. Paul females responded in this way.

In general, it may be concluded that differences between the Edmonton sample and the comparative samples on the Dimensions of Religious Commitment Scale, where valid, are greater for females than for males.

TABLE VIII

Religious Knowledge (Per cent with Correct Answers)

	Edmonton		New York ^b		St. Paul ^c	
	M	Fa	M	F	M	F
The Great Western Schism in the Catholic Church occurred in which of the following centuries?	25.8	31.6	39	29	38	39
Most of the Twelve Apostles who followed Jesus were:	83.5	81.6	96	95	90	94
The Dogma of the Assumption was solemnly defined in which one of the following years?	17.2	22.3	30	23	21	23
Give the names of the four men whom you think wrote the four gospels.	72.2	75	92	90	75	88
The Second Vatican Council was called together by Pope:	21.9	13.3	77	84	73	81
The four Gospels were first written in:	5.8	4.7	14	3	6	12

In Tables VIII-XIII

^aM = Male

F = Female

^{b,c}From Weigert and Thomas (1974)

Table IX
Religious Belief (In Percents)

	Edmonton		New York		St. Paul	
	M	F	M	F	M	F
Which of the following statements comes closest to what you believe about God?						
(1) I know God really exists and I have no doubts about it.	21.9	18.3	30	43	24	41
(2) Although I have doubts, I feel that I do believe in God.	38.6	53.9	40	47	52	47
(3) I find myself believing in God some of the time, but not at other times.	18.4	16.5	11	6	15	6
(4) I don't believe in a personal God, but I do believe in a higher power of some kind.	8.8	3.5	9	2	6	3
(5) I don't know whether there is a God and I don't believe there is any way to find out.	7.9	7.0	8	2	4	3
(6) I don't believe in God.	4.4	0.9	2	1	0	0
Which of the following statements comes closest to what you believe about Jesus?						
(1) Jesus is the Divine Son of God and I have no doubts about it.	30.4	36.7	29	51	31	45
(2) Although I have some doubts, I feel basically that Jesus is Divine.	43.5	44.2	39	35	51	46
(3) I feel that Jesus was a greatman and very holy, but I don't feel Him to be the Son of God anymore than all of us are children of God.	6.1	0.8	13	1	6	3
(4) I think Jesus was only a man although an extraordinary one.	8.7	7.5	10	2	7	3
(5) Frankly, I'm not entirely sure there was such a person as Jesus.	11.3	10.8	9	2	6	3
The Bible tells of many miracles, some credited to Christ and some to other prophets and apostles. Generally speaking, which of the following statements comes closest to what you believe about Biblical miracles?						
(1) I am not sure whether these miracles really happened or not.	23.5	21.7	28	14	29	21
(2) I believe miracles are stories and never really happened.	4.3	2.5	17	0	8	6
(3) I believe the miracles happened, but can be explained entirely by natural causes.	13.0	4.2	23	4	14	10
(4) I believe the miracles happened and can be only partly explained by natural causes.	36.5	44.2	22	60	38	49
(5) I believe the miracles actually happened just as the Bible says they did.	22.6	27.5	9	23	12	16
What do you think is the truth of the statement "the Devil actually exists"?						
(1) completely true	14.8	8.4	10	31	18	27
(2) probably true	40.9	48.7	32	47	49	55
(3) probably not true	33.9	36.1	31	14	23	10
(4) definitely not true	10.4	6.7	28	7	11	9

Ethical Belief (In Percents)

	Edmonton		New York		St. Paul	
	M	F	M	F	M	F
Practising artificial birth control is a serious sin.						
(1) Strongly agree	4.3	1.7	5	16	4	11
(2) Agree	2.6	5.9	5	14	7	13
(3) Undecided	28.7	23.5	19	28	28	38
(4) Disagree	36.5	38.7	28	26	36	22
(5) Strongly disagree	27.9	30.2	44	16	26	16
There is an afterlife in which God will punish or reward a person for the way he lived on earth.						
(1) Strongly agree	12.2	7.5	16	43	14	34
(2) Agree	30.4	25.8	31	42	45	43
(3) Undecided	44.3	49.2	32	11	33	21
(4) Disagree	9.6	12.5	10	3	6	2
(5) Strongly disagree	3.5	5.0	10	1	3	1
It is a serious sin to discriminate against someone because of his race.						
(1) Strongly agree	33.9	51.7	24	42	25	59
(2) Agree	43.5	30.8	31	37	37	28
(3) Undecided	12.2	9.2	19	7	19	5
(4) Disagree	7.0	5.8	17	9	13	4
(5) Strongly disagree	3.4	2.5	10	5	7	4

Table XI
Religious Experience (In Percents)

	Edmonton		New York		St. Paul	
	M	F	M	F	M	F
Have you had a feeling you were somehow in the presence of God?	10.6	16.8	17	47	20	36
(1) Yes, I'm sure I have.	10.6	16.8	17	47	20	36
(2) Yes, I think I have.	45.1	40.3	36	39	45	44
(3) No, I do not think I have.	31.0	35.3	26	9	26	14
(4) No, I'm sure I have not.	13.3	7.6	21	5	10	6
Have you had a sense of being saved in Christ?						
(1) Yes, I'm sure I have.	9.6	8.4	10	24	8	22
(2) Yes, I think I have.	28.7	33.6	32	36	27	35
(3) No, I do not think I have.	40.0	44.5	31	31	42	34
(4) No, I'm sure I have not.	22.6	13.5	28	9	23	9
Have you had a feeling of being punished by God for something you have done?						
(1) Yes, I'm sure I have.	20.9	21.8	27	40	30	34
(2) Yes, I think I have.	28.7	38.7	29	41	44	37
(3) No, I do not think I have.	30.4	25.2	21	11	11	22
(4) No, I'm sure I have not.	20.0	14.3	23	8	15	8
Have you had a feeling God tried to communicate with you directly?						
(1) Yes, I'm sure I have.	0.9	4.2	6	16	8	13
(2) Yes, I think I have.	13.9	16.7	14	25	19	21
(3) No, I do not think I have.	51.3	57.5	36	37	37	49
(4) No, I'm sure I have not.	33.9	21.6	44	23	36	22
Have you had a feeling of being tempted by the devil?						
(1) Yes, I'm sure I have.	16.5	12.6	27	58	37	47
(2) Yes, I think I have.	31.3	33.6	28	28	36	34
(3) No, I do not think I have.	26.1	29.4	18	8	16	10
(4) No, I'm sure I have not.	26.1	24.3	27	5	11	9

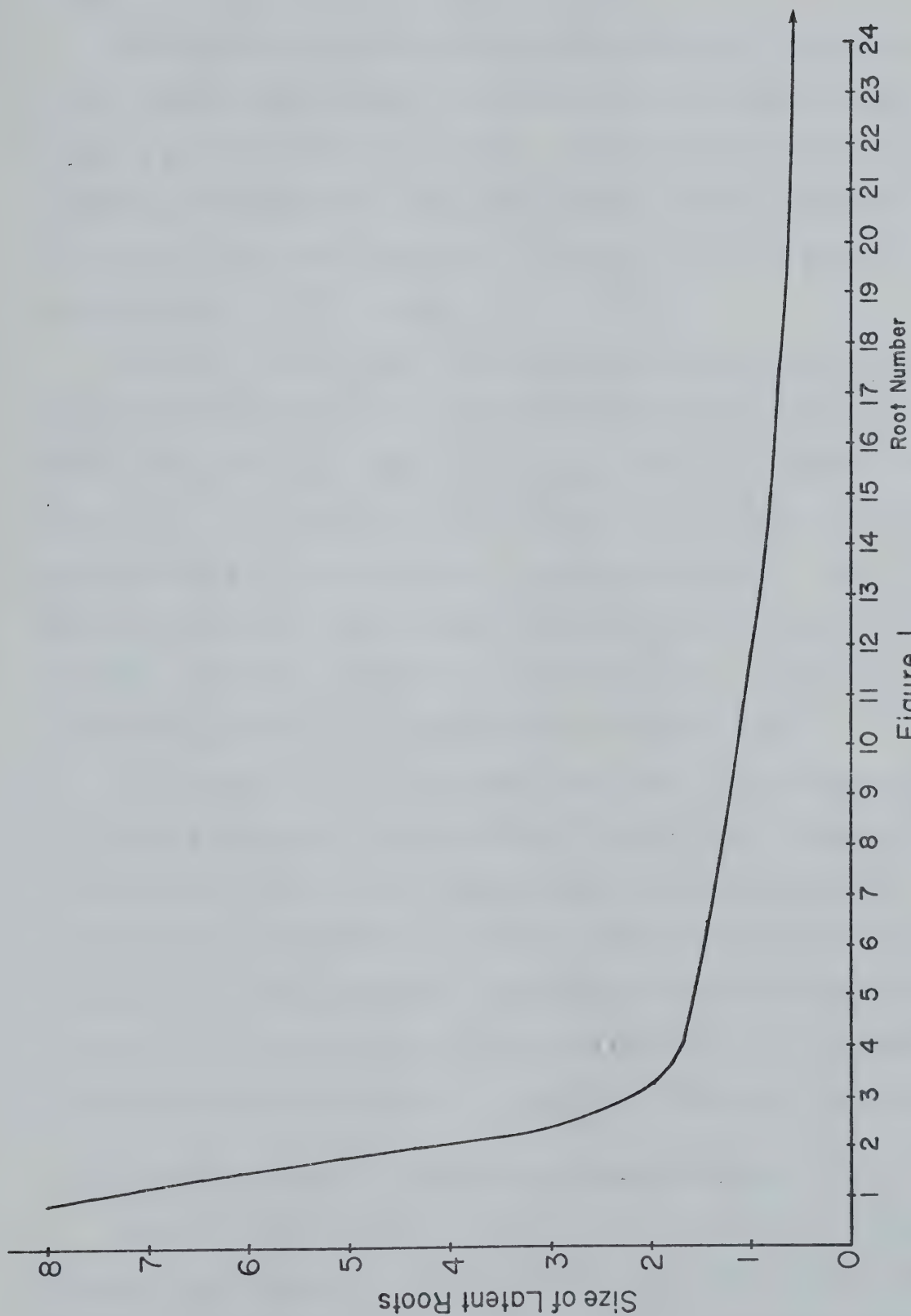
Table XII
Religious Practice (In Percents)

	Edmonton		New York		St. Paul	
	M	F	M	F	M	F
How often, if ever, in the last year, did you attend church services?						
(1) Twice a week or oftener	0.0	2.5	7	9	2	3
(2) Once a week	42.6	44.9	57	81	81	91
(3) Two or three times a month	13.9	9.3	15	4	11	2
(4) Once a month	15.7	17.8	6	2	3	3
(5) A few times a year or less	23.5	22.0	12	3	3	2
(6) Never	4.3	3.5	3	1	1	0
How often have you prayed in the last year?						
(1) Three times a day or oftener	2.7	1.7	8	40	7	28
(2) Once or twice a day	20.4	28.0	23	36	29	46
(3) Two or three times a week	18.6	23.7	16	15	28	16
(4) A few times a month	23.0	17.8	20	5	19	6
(5) A few times a year	25.7	22.9	20	4	13	2
(6) Never	9.7	5.9	14	1	5	2
How often have you received Communion during the last year?						
(1) Twice a week or oftener	0.9	0.8	3	4	2	2
(2) Once a week	36.0	39.0	20	47	31	60
(3) Two or three times a month	13.2	11.0	14	26	20	22
(4) Once a month	16.7	22.9	20	11	22	8
(5) A few times a year or less	22.8	19.5	32	11	20	5
(6) Never	10.4	6.8	12	1	5	2
How often in the last year have you taken part in any activities or organizations of your church <u>other than</u> attending services?						
(1) Once a week or oftener	5.2	2.5	13	10	6	7
(2) Two or three times a month	0.9	6.7	9	12	5	9
(3) Once a month	3.5	7.5	4	21	8	13
(4) A few times a year or less	33.9	27.5	19	29	33	43
(5) Never	56.5	55.8	56	28	47	28
How often, if ever, did you go to confession in the last year?						
(1) Once a week or oftener	0.0	0.0	3	0	0	1
(2) Once or twice a month	1.7	1.7	23	24	22	35
(3) A few times a year	29.6	36.7	44	67	58	53
(4) Once a year	27.0	25.0	11	8	10	7
(5) Never	41.7	36.6	20	1	10	4

Table XIII

Religious Consequences: Conformity to
Priest and Certitude of Life's Meaning (In Percents)

		Edmonton	
		M	F
The Priest wants you to read a particular book. You do not want to read it. What would you really do?			
(1)	Read the book	46.5	60.0
(2)	Refuse to read it	53.5	40.0
You want to vote for a particular person in a high school election, but you know the Priest would like you to vote for the other person. What would you really do?			
(1)	Vote for the "particular person".	82.6	86.6
(2)	Vote for the "other person".	17.4	13.4
The Priest wants you to go to a Catholic college. You do not want to go. What would you really do?			
(1)	Go to the Catholic college.	6.1	12.6
(2)	Refuse to go.	93.9	87.4
How sure are you that you have found the answers to the meaning and purpose of life?			
(1)	I am quite certain and I pretty much grew up with knowing these things.	7.8	10.9
(2)	I am quite certain although at one time I was pretty uncertain.	13.9	17.6
(3)	I am uncertain whether or not I have found them.	48.7	58.0
(4)	I am quite sure I have not found them.	20.9	5.9
(5)	I don't really believe there are answers to these questions.	8.7	7.6



Root Number

Figure 1

PIL AND SONG SCREE TEST

Factor Analysis of the Purpose in Life and Seeking of Noetic Goals

Tests

The purpose of factor analysis in this study was to determine what common factors were present in the Purpose in Life Test (PIL) and the Seeking of Noetic Goals Test (SONG). This was considered useful as an attempt to identify more clearly the somewhat elusive components inherent in the theoretical constructs of purpose in life, existential vacuum and motivation to find meaning.

Pearson's product moment correlation coefficients were employed to compute an intercorrelation matrix from the forty items of the PIL and SONG. This matrix was then subjected to a principal component analysis resulting in the extraction of forty roots. On the basis of eigenvalues greater than 1.00 and verified by a scree test (Cattell, 1966), it was decided to consider only factors 1 to 11 for further interpretation. Figure I illustrates the scree test with the point of relatively uniform fall-off of the curve at about root number eleven.

The eleven principal components were rotated in accordance with the Varimax criterion, employing Kaiser's strict limit (Kaiser, 1958). The resultant varimax factor loading matrix was then examined to obtain a factor structure on the basis of loadings in excess of $\pm .30$. Appendix D indicates the factor structure of the eleven factors which accounted for 61.82 per cent of the total variance. A brief theoretical interpretation of each factor is given in the following discussion.

Factor 1: "Life Fulfillment versus Meaninglessness"

Factor 1 accounts for 11.76 per cent of the total variance and receives high loadings as reported in Table XIV. This factor is composed of the basic concept of "Life Fulfillment versus Meaninglessness"

Table XIV
Varimax Factor Loading Matrix (Factors 1,2)

Variable	Factor 1	Variable	Factor 2
Excitement/Routine	0.78	Think About ultimate Meaning of life	0.79
Enthusiasm/Boredom	0.71	Urge to find self	0.76
Constant Newness/Sameness	0.70	Puzzled and disturbed by mystery of life	0.68
Exciting Life/Despair	0.70	Feel Lack of real meaning	0.61
Daily tasks pleasurable/Boring	0.70	Need new Lease on life	0.49
Worthwhile life/Despair	0.57	Feeling life incomplete	0.43
Meaningful life/Meaninglessness	0.54	Need for real meaning	0.38
Desire for many more lives/Choose never to be born	0.48	Life goal found than lost	0.37
Progress in life goal achievement	0.43	Restlessness	0.34
Control over life/Controlled	0.37		
Restlessness	-0.34		
Feeling life incomplete	-0.33		
Clear reason for existing/Wonderment	0.32		
Lack of worthwhile job	-0.31		

derived predominantly from measures of the PIL test. Only three SONG test measures occur relating to restlessness, a feeling of incompleteness and the lack of a worthwhile job all of which receive negative loadings. A sense of enthusiasm, excitement and worthwhileness as opposed to boredom, routine and despair permeates the concept comprising Factor 1. This factor appears to be a general factor relating to Frankl's basic notions of meaning in life.

Factor 2: "Need to Find Real Meaning"

Factor 2, accounting for 8.48 per cent of the total variance, has representative loadings given in Table XIV. This factor is composed exclusively of the SONG test items. It appears to be distinct in being related to the urge to find ones' self and the motivation to find real meaning. The restlessness, and incompleteness which received negative loadings in Factor 1, are positively loaded in Factor 2. The exclusion of variables from the PIL supports the distinctive characteristic of the SONG from the PIL as contended by Crumbaugh (1977). The theoretical construct of high motivation to find life meaning, as the SONG purports to measure, is strongly evident in this factor.

Factor 3: "Clarity of Life Goals"

Factor 3 accounts for 7.87 per cent of the total variance with the constituent loadings reported in Table XV. This factor emphasizes a clarity of life mission and world role. With the exception of one variable, Factor 3 is composed exclusively of variables from the PIL test. As with Factor 2, this factor similarly supports the distinctiveness of the PIL and the SONG. Strongly represented in Factor 3 is the great ability to find life meaning. Five variables relating to the

Table XV

Varimax Factor Loading Matrix (Factors 3,4)

Variable	Factor 3	Variable	Factor 4
Great ability to find life meaning/None	0.68	Change of main life objective	0.75
Clear cut life mission/None	0.63	Very clear goals/No goals	-0.62
Clear reason for existing/Wonderment	0.59	Life Goal Found/Than Lost	0.53
Meaningful role in world/Confusing role	0.59	Attempt new goal before old one complete	0.45
Meaningful life/Meaninglessness	0.43	Lack of worthwhile job	0.34
Very clear goals/No goals	0.40	Clear cut life mission/None	-0.33
Aware of consuming life purpose	0.39		
Worthwhile life/Completely worthless Life	0.34		
Progress in Life Goal Achievement/No progress	0.33		
Control over Life/Controlled by External Forces	0.32		
Pleasureful Daily Tasks/Boring	0.30		

meaningfulness of life are also shared by Factor 1.

Factor 4: "Life Change Objectives"

Factor 4 which appears to be related to the changing of the main objective of one's life, accounts for 6.15 per cent of the total variance. The representative loadings are given in Table XV. The notion of attempting a new goal before having accomplished the old one is related to the lack of a worthwhile job. The two PIL measures occurring in this factor are negatively loaded as would be expected with their stress on clear cut life goals.

Factor 5: "Future Hope"

Factor 5 accounts for 4.95 per cent of the total variance and has high loadings on variables related to an exciting, fulfilling future. All of the variables found in this factor are from the SONG and are consistent with its orientation of motivation to find a meaning which is not now present. Table XVI gives the representative loadings for Factor 5.

Factor 6: "Adventure-Achievement"

The percentage of the total variance accounted for by Factor 6 is 4.78 per cent. The representative loadings are given in Table XVI. This factor consists exclusively of measures constituting the SONG and has been tentatively labelled "Adventure-Achievement". Interestingly this factor relates the need for adventure and a determination to achieve beyond the ordinary with a need for real meaning.

Factor 7: "Life-Death Question"

Factor 7 accounts for 4.57 per cent of the total variance with

Table XVI
Varimax Factor Loading Matrix (Factors 5-8)

Variable	Factor 5	Variable	Factor 6
Hope for exciting future	0.76	Need for adventure	0.77
Greatest fulfillment yet to come	0.55	Determination to achieve beyond ordinary	0.67
Think of achieving new and different	0.44	Attempt new goal before old one complete	0.38
Dream of new identity	0.40	Think of achieving new and different	0.35
		Need for real meaning	0.32

Variable	Factor 7	Variable	Factor 8
Serious suicide thoughts/ Never	0.70	Attempt new activities then lose interest	0.77
Desire for many more lives/ Choose never to be born	0.59	Aware of consuming life purpose	-0.52
Dream of new identity	-0.43	Prepared and unafraid of death/Unprepared and afraid	0.39
Meaningful world role/ Confusing role	0.39		
Prepared and Unafraid of death/ Unprepared and afraid	-0.35		

with constituent loadings reported in Table XV. Clearly, this factor represents the life-death question with its related aspects of suicide thoughts, choice about birth, and acceptance of death. All except one of the variables are from the PIL. The one SONG variable, which loads negatively here, is that of daydreaming of a new identity. Factor 7 shares the variable referring to the desire for many more lives with Factor 1.

Factor 8: "Transitoriness of Life"

Factor 8, which accounts for 3.44 per cent of the total variance, loads heavily on the variable which considers the trait of attempting new activities, then losing interest in them. Table XVI gives the constituent loadings. Of the two SONG variables reflected in this factor, one is negatively loaded, that of an awareness of a consuming life purpose. The variable relating to preparedness for death is included in Factor 8. A possible reason for this may be the view which is held by some teenagers that life is transitory as well as the growing interest in thanatology. The unwillingness to make permanent commitments relates to the main theme of this factor.

Factor 9: "Personal Responsibility"

The factor which accounts for 3.40 per cent of the total variance is Factor 9. The representative loadings are given in Table XVII. Both variables represented in this factor reflect a freedom and responsibility relationship. In fact, the responsibility variable is the most heavily loaded of all the variables appearing in the Factor Loading Matrix and appears only in Factor 9. Responsibility and freedom, both PIL variables, appear to be seen by the teenagers as related to meaning

Table XVI
Varimax Factor Loading Matrix (Factors 9-11)

Variable	Factor 9	Variable	Factor 10
Responsible/Irresponsible	0.82	Post-retirement excitement/ Chance to loaf	0.78
Absolute Freedom/Bound by Hereditry and Environment	0.49	Dream of new identity	-0.37
		Restlessness	-0.34

Variable	Factor 11
Absolute freedom/Bound by heredity and environment	0.42
Lack of worthwhile job	0.41
Control over life/Controlled by external forces	0.41
Need for real meaning	0.39
Restlessness	0.34
Greatest fulfillment yet to come	0.32

in life. The fact that only PIL variables load in this factor would indicate that it is unrelated to motivation to find meaning in life.

Factor 10: "Post-Retirement Excitement"

Factor 10 accounts for 3.29 per cent of the total variance with loadings reported in Table XVII. Strongly represented in this factor, with a high positive loading, is the PIL variable which measures one's post-retirement choice of doing exciting things. Interestingly, the two other variables, daydreaming of a new identity and restlessness are also represented in Factor 9, but are negatively loaded.

Factor 11: "Freedom Control"

The problem of freedom or being bound by heredity and environment which appeared as a variable in Factor 9 is also represented in Factor 11. The percentage of the total variance accounted for by Factor 11 is 3.15 per cent. The representative loadings are reported in Table XVII. This factor has variables from both the PIL and the SONG, and has been labelled the freedom-control factor. A sense of incompleteness and lack of fulfillment present in the four SONG variables are thus related to the freedom-control concept. Such a relationship may possibly indicate the view of freedom held by teenagers as related to a need for real meaning which would support Frankl's theory of logotherapy (Frankl, 1965).

Conclusion

Brief summaries of the eleven factors with their representative loadings have been given in an attempt to understand more clearly the general and specific components of the SONG and the PIL research instruments. Though there are distinct factors in each instrument,

some factors are representative of variables from both (Table XVIII). The "Personal Responsibility" factor is the only factor which consists exclusively of PIL variables, suggesting that the PIL test reflects a strong freedom-responsibility construct. Factors exclusive to the SONG test reflect the following concepts: urge to find real meaning, future hope and adventure-achievement. The remaining seven factors (Table XVIII) reflect concepts common to both the PIL and the SONG. Crumbaugh's (1977) contention that the SONG is a complementary scale to the PIL would seem to be supported by this study. The analysis of the internal structure confirms that these tests measure what they purport to do: strength of motivation to find meaning for the SONG, and meaning in life or existential vacuum for the PIL. The factor analysis of data obtained in this study of teenagers provides a continuation of the research related to the structure of the factors in different types of samples.

Table XVIII
SPECIFIC AND COMMON FACTORS OF THE PIL AND SONG TESTS

PIL FACTORS	SONG FACTORS	COMMON FACTORS
Factor 9	Factor 2	Factor 1
	Factor 5	Factor 3
	Factor 6	Factor 4
		Factor 7
		Factor 8
		Factor 10
		Factor 11

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Theoretical Conclusions

The findings obtained in the foregoing chapter lead to some interesting and significant conclusions theoretically as well as practically. Implications for education, for curriculum development as well as for the counselling of teenagers are noteworthy.

The basic question to which this study has addressed itself as to the relationship between meaning in life and religious commitment has been positively affirmed. The students from the two Catholic High Schools who have found meaning and purpose in life have a higher degree of religious commitment than those who have not. The present findings are consistent with the theoretical affirmations of Frankl (1965, 1975) and Crumbaugh (1973), as well as research by Currie (1973) and Crandall & Rasmussen (1975) cited in Chapter II. Though meaning in life is a secular concept, as Frankl has continuously stressed throughout his writings, it appears to be strengthened by religious commitment. Religion, by offering belief in a transcendent being, provides someone to love, a cause for which to live, as well as a meaning to suffering. The religious dimension, when included in the discovery of life meaning would seem to strengthen that discovery.

Once the teenage participants in this study had found life meaning they tended not to be motivated to find new meaning. This finding concurs with that of Crumbaugh (1977). An evaluation of this characteristic leads to questions as to its desirability. Do our young people adequately appreciate the dynamic, process dimension of life? Is their world view too static, lacking in creativity and profundity? Though

further research is required on these topics, the author of this thesis would suggest that many people today, including youth, remain imbued with a static world view. The lack of reflection on the real meaning of life, personal and social; the lack of a spirit of striving to become who one ought to be, is a lacuna evident in our society.

As to any difference between boys and girls in perceiving meaning in life, this study found no significant differences as was also reported by Crumbaugh (1969) and Meir & Edwards (1974). Perhaps greater refinement of the research instrument is required to assess in greater depth the life meaning construct. The general, abstract nature of many of the PIL and SONG test items, as well as the tendency for respondents to give neutral responses, tends to detract from an indepth assessment of the life meaning dimensions. An additional problem is inherent in self report research instruments such as those employed in this study. Only to the extent that the reported responses convey the actual attitudes, beliefs and practices of the subjects are they authentic measures.

The relationship between age and meaning in life was a further question posed in this study. No significant correlation was found between the age of the students and the degree to which they perceive that they have discovered a purpose in life. This finding would support that of Crumbaugh (1969), however the small age differential within the teenage sample of 16-19 year olds under study would tend to mask real differences. Comparisons with an older adult group, as in the study of Meir & Edwards (1974), would possibly reveal a greater meaning and purpose in life for older adults than for the teenage group. Further research on the developmental quality of meaning discovery, on the qualitative nature of meaning, and the nature of life

experiences that enhance meaning would facilitate a better understanding of this concept.

The traditional supposition that females are more "religious" than males was supported by this study. The girls achieved higher religiosity scores than did the boys. Previous research such as that of Rokeach (1968, 1973) and Weigert & Thomas (1974) has reported similar results. Questions posed by these findings are provocative. Does traditional religion appeal more to females than to males? Why are the teenage girls in the sample under study so much more submissive to religious authorities than are the boys? With the women's liberation movement, will such tendencies change? Interestingly, the Edmonton sample of high school girls is much less conformist in the area of ethical beliefs than were their New York and St. Paul, U.S.A. counterparts approximately eight years ago (Weigert & Thomas, 1974). The highly significant differences between rural and urban girls in their attitudes toward religion and morality, as reported by Light (1970), also bears further consideration in relationship to these questions.

The relationship of religious influence on their parents and the degree to which the teenagers in this study had discovered meaning in life was a further interest to the author. Only the influence of religion on the mother seems to have significantly influenced the discovery of life meaning by her children. The influence of religion on the father does not seem to be significantly related to the meaning question for his teenager sons and daughters. With a growing emphasis on the responsibility of fathers in child rearing, such findings may require reevaluations in the future. Interestingly, whether the parents were Catholic or not does not seem to matter in the question

of life meaning discovery.

As they increase in age, the high school students under study, tend to subscribe less to traditional religious belief and practices without questioning. Considering that the belief dimension is the single best indicator of religiosity, the question of what constitutes mature religious belief as well as how such belief should best be expressed for teenagers arises.

Educational Implications

Certain educational implications follow from the foregoing study. Considering that 29 per cent of the teenagers report that they perceive a definite lack of meaning and purpose in their lives, the need for theoretical and practical education is obvious. A curriculum in such subject areas as social studies, family life education and religious studies which excludes the life meaning question is not responding to a basic human need. Moreover a philosophy of education which ignores the importance of life purpose does a disservice to youth and will only further the growing incidence of existential vacuum. A greater awareness of the importance of life meaning on the part of administrators, parents, and teachers would facilitate the discovery of life meaning by young people. Adult models who could give direction and provide guidance in the life meanings aspect of the adolescent identity crisis appear to be much needed in a world of conflicting value orientations.

With the growing body of research on the value of logotherapy, in areas such as juvenile delinquency and alcoholism, we would recommend that school counsellors consider its use in individual and group sessions with students. Logotherapy, such as the guide to self-fillment through loganalysis as outlined by Crumbaugh (1973), could well

serve as a deterrent to teenage disillusionment, aimlessness, violence, excessive use of alcohol and drugs, and suicide.

The factor analysis section of this study with a confirmation of the structure of the PIL and SONG tests, suggests the need to develop sub-scale scores that could focus on specific issues in the valuing process such as clarifying life goals, developing hope in the future rather than opting for suicide, and converting the idealism of youth into constructive efforts to build a better world.

If, as Erikson and others insist, the adolescent needs values upon which to found his identity, and if the pressure continues from society that schools seriously pursue the role of value educator while faced with the challenge of a pluralistic society, then Frankl's search for meaning fills a real need in curriculum development and aids the teacher who wants to give his students values that will last without presuming to impose his own. The stress of logotherapy on the search for a personal set of meanings certainly removes it from the realm of religious indoctrination, stressing the individual's free search for his own life meanings. The role of the teacher then becomes that of guide, helper, assistant, or perhaps better, challenger to the child and adolescent to search for himself. This maximizes the degree of freedom of the student and gives some guidelines to the teacher not only in the "public" schools where religious pluralism seems often the nemesis to value education, but in "private" and "religious" schools where the opposite danger lies of indoctrinating in a narrow set of values or handing the student a ready made "purpose in life" that runs the risk of being accepted by the adolescent through the sheer force of conformity rather than an exercise of his highest levels of

intelligence and free choice. Logoanalysis gives that choice, and while giving the educator some guidelines in how to deal with young people, it gives these young people the challenge to think, feel and act at the highest, transcendent, levels of their beings.

Suggestions for Further Research

Since this study has assessed only high school students from two Edmonton Catholic schools, future research could include a cross section of a greater number of Catholic schools.

Comparisons with public school students as well as with teenagers belonging to other religious denominations would be of interest.

Valuable, too, would be comparisons with high school students in rural areas of Alberta.

The developmental nature of the relationship between purpose in life and religious commitment could be assessed by longitudinal studies assessing changes over ten or more years.

With the growing concern about adult-teenage communications, a study comparing the purpose in life and religiosity of parents with their teenage children would be valuable.

For counsellors, comparative assessment of the effectiveness of logotherapy and other forms of individual and group therapy for teenagers would be helpful.

Finally, all our educational institutions must periodically assess their objectives, for if education does not facilitate the discovery of meaning in life, then surely it has failed in a basic area of human living, indeed in human survival. To echo Frankl (1978), only if we are cognizant of the higher aspirations of students, such as their will to meaning, will we be able to muster and to mobilize these

aspirations. Far from overrating young people, the danger lies in underrating them. Young people, with their paradoxical combination of disillusionment and idealism, may ultimately fail to achieve their potential because they have been underrated. As Goethe has said, "Take a man where he is and you leave him there; take him where he ought to be and you make him better."

Bibliography

- Allport, G.W. The Individual and His Religion. New York: Macmillan Pub., 1950.
- Argyle, M. Religious Behavior. London: Routledge & Kegan Paul, 1958.
- Baum, G. Religion and Alienation: A Theological Reading of Sociology. New York: Paulist Press, 1975.
- Berger, P. The Sacred Canopy. New York: Doubleday, 1967.
- Berger, P., Berger, B. & Kellner, H. The Homeless Mind: Modernization and Consciousness. New York: Random House, 1973.
- Black, W.A. & Gregson, R.A. Time perspective, purpose in life, extraversion and neuroticism in New Zealand prisoners. British Journal of Social and Clinical Psychology, 1973, 12, 50-60.
- Boldt, M. Report on the task force on suicides to the Minister of Social Services and Community Health. The Prov. of Alberta, May 1976.
- Cavanagh, M.E. The relationship between Frankl's "will to meaning" and the discrepancy between the actual self and the ideal self. Unpublished Ph.D. dissertation, University of Ottawa, 1966.
- Coady, M.F. A Study of Adolescent Religious Tendencies. Unpublished M.Ed. thesis, University of Alberta, 1973.
- Crandall, J.E. & Rasmussen, R.D. Purpose in life as related to specific values. Journal of Clinical Psychology, 1975, 31(3), 483-485.
- Crumbaugh, J.C. The case for Frankl's "will to meaning". Journal of Existential Psychiatry, 1963, 4, 43-48.
- _____. The application of logotherapy. Journal of Existentialism. 1965, 5, 403-412.
- _____. Cross-Validation of Purpose-In-Life Test Based on Frankl's Concepts. Journal of Individual Psychology, 1968, 24, 74-81.
- _____. Frankl's logotherapy: A new orientation in counselling. Journal of Religion and Health. 1971, 10, 373-86.
- _____. Everything to Gain: A Guide to Self-fulfillment through Logoanalysis. Chicago: Nelson-Hall, 1973.
- _____. The Seeking of Noetic Goals Test (Song): A Complementary Scale to the Purpose in Life Test (PIL). Journal of Clinical Psychology, July, 1977, 33(3), 900-907.
- Crumbaugh, J.C. & Maierlick, L.T. An Experimental Study in existentialism:

- the psychometric approach to Frankl's concept of noogenic neurosis. Journal of Clinical Psychology, 1964, 20, 200-207.
- Crumbaugh, J.C. et al. Frankl's will to meaning in a religious order. Journal of Clinical Psychology, 1970, 26, 206-207.
- Currie, R. Religion and Images of Man Among Calgary Youth. Unpublished Ph.D. dissertation. Fordham University, 1973.
- Davidson, F. et al. Suicide among Adolescents: A Medical-social report of 139 who attempted suicide. Hygiene Mentale. 1972, 61(1), 1-32.
- Downing, L.N. Logotherapy in Counselling Theories and Techniques. Chicago: Nelson-Hall, 1975.
- Dunphy, D.C. The social structure of urban adolescent peer groups. Sociometry, 1963, 26, 230-246.
- Durlak, J.A. Relationship between individual attitudes toward life and death. Journal of Consulting & Clinical Psychology. 1972, 38(3), 463.
- Erickson, E.H. The Problem of Ego Identity. Journal of the American Psychoanalytic Association. 1956, 4, 56-121.
- _____. Youth: Change and Challenge. New York: Basic Books, 1963.
- _____. Identity, Youth and Crisis. New York: W.W. Norton & Co., 1968.
- Fabry, J.B. The Pursuit of Meaning. Boston: Beacon Press, 1968.
- Faulkner, J.E. & DeJong, G. Religiosity in 5-D: An empirical analysis. Social Forces. 1966, 45, 246-254.
- _____. On measuring the religious variable: Rejoinder to Weigert and Thomas. Social Forces. 1969, 48, 263-267.
- Ferguson, G.A. Statistical Analysis in Psychology and Education. Third Edition. New York: McGraw-Hill Book Co., 1971.
- Fichter, J. Dynamics of a City Church: Southern Parish. Chicago: University of Chicago Press, 1951. Parochial School. Notre Dame, Ind.: University of Notre Dame Press, 1958.
- Fox, D.A. Logotherapy and religion. Religion in Life, 1965, 31, 235-44.
- Frankl, V.E. Contributions to critical incidents in Psychotherapy. S.W. Standal and R.J. Corsini, eds. Englewood Cliffs, New Jersey: Prentice-Hall, 1959.

- Frankl, V.E. From Death-Camp to Existentialism. Trans. by E. Lasch
Boston: Beacon Press, 1959. Revised and reissued as Man's Search
for Meaning: An Introduction to Logotherapy, 1962.
- _____. The Doctor and the Soul: From Psychotherapy to
Logotherapy. New York: Alfred A. Knopf, 1965.
- _____. Logotherapy and existential analysis: a review. American
Journal of Psychotherapy, 1966, 20, 252-260.
- _____. Psychotherapy and Existentialism. New York: Washington
Square Press, 1967.
- _____. The Will to Meaning: Foundations and Applications of
Logotherapy. New York: New American Library, 1968.
- _____. The Unconscious God. New York: Simon & Schuster, 1975.
- _____. 'Man's Search for Ultimate Meaning in On the Way to Self-
knowledge: Sacred Tradition and Psychotherapy. J. Needleman and
D. Lewis, eds. New York: Alfred A. Knopf, Inc., 1976.
- _____. The Unheard Cry for Meaning. New York, Simon and
Schuster, 1978.
- Garfield, C.A. A psychometric and clinical investigation of Frankl's
concept of existential vacuum and of anomic. Psychiatry. 1973,
36(4), 396-408.
- Gerz, H.O. The treatment of the phobic and the obsessive-compulsive
patient using paradoxical intention sec. Viktor E. Frankl.
Journal of Neuro-psychiatry, 1962, 3, 375.
- _____. Six years of clinical experience with the logotherapeutic
technique of paradoxical intention in the treatment of phobic
and obsessive-compulsive patients. American Journal of Psychiatry,
1966, 123, 548-553.
- Glock, C.Y. et al. Adolescent Prejudice. New York: Harper & Row,
1975.
- Glock, C.Y. & Stark, R. Religion and Society in Tension. Chicago:
Rand-McNally, 1965.
- Goldman, R. Religious Thinking from Childhood to Adolescence. London:
Routledge and Kegan Paul, 1964.
- Greeley, A.M. Religion and Career. New York: Sheed and Ward, 1963.
- _____. Unsecular Man. New York: Schocken, 1972.
- Greeley, A.M. et al. Catholic Schools in a Declining Church. Kansas
City. Sheed and Ward, 1976.

- Greeley, A.M. & P.H. Rossi. The Education of Catholic Americans. Chicago: Aldine, 1966.
- Grollman, E.A. Concerning Death: A Practical Guide for the Living. Boston: Beacon Press, 1974.
- Hague, W. Life meaning and the child. The Alberta Counsellor, Fall, 1978, in press.
- _____. Value Systems and Vocational Choice of the Priesthood, Unpublished Ph.D. dissertation, University of Alberta, 1968.
- James W. The Varieties of Religious Experience. New York: Longmans, Green and Co., 1902.
- Kaiser, H.F. The varimax criterion for analytic notation in factor analysis. Psychometrika, 1958, 23, 187-200.
- Klitzke, L.L. Students in emerging Africa: Humanistic psychology and Logotherapy in Tanzania. American Journal of Humanistic Psychology 1969, 9, 105-26.
- Kotchen, T.A. Existential mental health: An empirical approach. Journal of Individual Psychology, 1960, 16, 174-181.
- Lefrancois, G.R. Adolescents. Belmont, California: Wadsworth Pub. Co., 1976.
- Lenski, G. The Religious Factor. Garden City: Doubleday & Co., 1961.
- Leslie, R.C. Jesus and Logotherapy: The Ministry of Jesus as Interpreted through the Psychotherapy of Viktor Frankl. New York: Abingdon Press, 1965.
- Light, H. Attitudes of rural and urban adolescent girls toward selected concepts. Family Coordinator, 1970, Jul. Vol. 19(3), 225-227.
- Marvell, J. Religious Beliefs and Moral Values; The Influence of the School. Educational Research, 1974, 16, 94-99.
- Maslow, A.H. Religions, Values, and Peak-Experiences. Columbus: Ohio State University Press, 1964.
- _____. Comments on Dr. Frankl's paper. Journal of Humanistic Psychology. 1966, 6, 107-12.
- _____. Metamotivation. Journal of Humanistic Psychology. 1967, 7, 153-154.
- Meir, A. & Edwards, H. Purpose-in-Life Test: Age and sex difference. Journal of Clinical Psychology. 1974, 30(3), 384-386.

- Mischel, W. Direct versus indirect personality assessment; Evidence and implications. Journal of Consulting and Clinical Psychology. 1972, 38, 319-324.
- Mitchell, J.J. Adolescence-- some critical issues. Toronto: Holt, Rinehart and Winston, 1971.
- Mitchell, J.J. The Adolescent Predicament. Toronto: Holt, Rinehart and Winston, 1975.
- Munns, M. Jr. The Values of Adolescents compared with Parents and Peers. Adolescence. 1972, 7, 519-524.
- Nyholm, S.E. A replication of a psychometric approach to existentialism. Unpublished master's thesis, University of Portland, 1966.
- O'Connell, W.E. Frankl, Adler and Spirituality. Journal of Religion & Health, 1972, 11(2), 134-138.
- Peatling, J.H. Cognitive Development in Pupils in Grades 4 Through 12; The Incidence of Concrete and Abstract Religious Thinking. Character Potential, 1974, 7, 52-61.
- Reiss, I.L. The Social Context of Premarital Sexual Permissiveness. New York: Holt, Rinehart & Winston, 1966.
- Remmers, H.H. and Radler, D.H. The American Teenager, New York. Holt, Rinehart & Winston, 1966.
- Rokeach, M. Beliefs, Attitudes and Values. San Francisco: Jossey-Bass Inc., 1968.
- _____. The nature of Human Values. New York: The Free Press, 1973.
- _____. Value Systems in Religion. Review of Religious Research. II, Fall, 1969, 3-23.
- Sahakian, W.S. Logotherapy: The will to meaning in History and Systems of Psychology. New York: John Wiley & Sons, Inc., 1975.
- Sallee, D.T. and Casciani, J.M. Relationship between sex drive and sexual frustration and purpose in life. Journal of Clinical Psychology, 1976, 32(2), 273-275.
- Selye, H. The Stress of My Life. Toronto: McClelland & Stewart, 1977.
- Sharpe, D. & Viney, L. Weltanschauung and the Purpose in Life Test. Journal of Clinical Psychology, 1973, 29, 489-491.

- Shean, G.D. & Fechtmann, F. Purpose in Life scores of student marihuana users. Journal of Clinical Psychology, 1971, 27, 112-113.
- Smart, R.N. Secular Education and the Logic of Religion. London: Faber and Faber, 1968.
- Stark, R. & Glock, C.Y. American Piety. Berkeley: University of California, 1968.
- Strunk, O. Jr. Note on self-reports and religiosity. Psychological Reports, 1958, 4, 29.
- Tillich, P. Systematic Theology. Chicago: University of Chicago Press, 1956, 1, 12.
- Tweedie, D.F. Logotherapy and the Christian Faith: An Evaluation of Frankl's Existential Approach to Psychotherapy. Grand Rapids, Mich. Baker House, 1961.
- Ungersma, A.J. The Search for Meaning: A New Approach in Psychotherapy and Pastoral Psychology. Philadelphia, Westminster Press, 1961.
- Vymetal, O. Acta Universitatis Palackianae. 1966, 13, 265-88.
- Weigert, A.J. & Thomas, D.L. Religiosity in 5-D: A critical note. Social Forces. 1969, 48, 260-263.
- _____. Secularization: A cross-national study of Catholic male adolescents. Social Forces. 1970, 49, 28-36.
- _____. Secularization and religiosity: A cross-national study of Catholic adolescents in five societies. Sociological Analysis. 1974, 35(1), 1-23.
- Yinger, M.J. The Scientific Study of Religion. New York: Macmillan, 1970.
- Wright, D., and Cox, E. A study of the relationship between moral judgment and religious belief in a sample of English adolescents. General Social Psychology. 1967, 72, 135-144.

APPENDIX A
THE SEEKING OF NOETIC GOALS TEST

Directions: For each of the following statements circle the number which most nearly represents your true feeling.

1. I think about the ultimate meaning of life:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Constantly

2. I have experienced the feeling that while I am destined to accomplish something important, I cannot quite put my finger on just what it is:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Constantly

3. I try new activities or areas of interest, and then these soon lose their attractiveness:

7	6	5	4	3	2	1
Constantly	Very Often	Often	Sometimes	Occasionally	Rarely	Never

4. I feel that some element which I can't quite define is missing from my life:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Constantly

5. I am restless:

7	6	5	4	3	2	1
Constantly	Very Often	Often	Sometimes	Occasionally	Rarely	Never

6. I feel that the greatest fulfillment of my life lies yet in the future:

7	6	5	4	3	2	1
Constantly	Very Often	Often	Sometimes	Occasionally	Rarely	Never

7. I hope for something exciting in the future:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Constantly

8. I daydream of finding a new place for my life and a new identity:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Constantly

9. I feel the lack of -- and a need to find -- a real meaning and purpose in my life:

7	6	5	4	3	2	1
Constantly	Very Often	Often	Sometimes	Occasionally	Rarely	Never

10. I think of achieving something new and different:

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Constantly

11. I seem to change my main objective in life:
 1 2 3 4 5 6 7
 Never Rarely Occasionally Sometimes Often Very Often Constantly
12. The mystery of life puzzles and disturbs me:
 7 6 5 4 3 2 1
 Constantly Very Often Often Sometimes Occasionally Rarely Never
13. I feel myself in need of a "new lease on life":
 7 6 5 4 3 2 1
 Constantly Very Often Often Sometimes Occasionally Rarely Never
14. Before I achieve one goal, I start out toward a different one:
 1 2 3 4 5 6 7
 Never Rarely Occasionally Sometimes Often Very Often Constantly
15. I feel the need for adventure and "new worlds to conquer":
 7 6 5 4 3 2 1
 Constantly Very Often Often Sometimes Occasionally Rarely Never
16. Over my lifetime I have felt a strong urge to find myself:
 1 2 3 4 5 6 7
 Never Rarely Occasionally Sometimes Often Very Often Constantly
17. On occasion I have thought that I had found what I was looking for in life, only to have it vanish later:
 1 2 3 4 5 6 7
 Never Rarely Occasionally Sometimes Often Very Often Constantly
18. I have been aware of all-powerful and consuming purpose toward which my life has been directed:
 7 6 5 4 3 2 1
 Constantly Very Often Often Sometimes Occasionally Rarely Never
19. I have sensed a lack of a worthwhile job to do in life:
 1 2 3 4 5 6 7
 Never Rarely Occasionally Sometimes Often Very Often Constantly
20. I have felt a determination to achieve something far beyond the ordinary:
 7 6 5 4 3 2 1
 Constantly Very Often Often Sometimes Occasionally Rarely Never

APPENDIX B

THE PURPOSE IN LIFE TEST

For each of the following statements, circle the number that would be most nearly true for you. Note that the numbers always extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgment either way; try to use this rating as little as possible.

1. I am usually

1	2	3	4	5	6	7
completely			(neutral)			exuberant,
bored						enthusiastic

2. Life to me seems:

7	6	5	4	3	2	1
always			(neutral)			completely
exciting						routine

3. In life I have:

1	2	3	4	5	6	7
no goals or			(neutral)			Very clear goals
aims at all						and aims

4. My personal existence is:

1	2	3	4	5	6	7
Utterly meaningless			(neutral)			very purposeful
without purpose						and meaningful

5. Every day is:

7	6	5	4	3	2	1
constantly new			(neutral)			exactly the same
and different						

6. If I could choose, I would:

1	2	3	4	5	6	7
prefer never to			(neutral)			Like nine more
have been born						lives just like
						this one

7. After retiring, I would:

7	6	5	4	3	2	1
do some of the exciting			(neutral)			loaf completely
things I have always wanted to						the rest of my life

8. In achieving life goals I have:

1	2	3	4	5	6	7
made no progress			(neutral)			progressed to com
whatsoever						plete fulfillment

9. My life is:

1	2	3	4	5	6	7
empty, filled only			(neutral)			running over with
with despair						exciting good thin

10. If I should die today, I would feel that my life has been:	7	6	5	4	3	2	1	96
very worthwhile				(neutral)			completely worthless	
11. In thinking of my life, I;	1	2	3	4	5	6	7	
often wonder why I exist				(neutral)			always see a reason for my being here	
12. As I view the world in relation to my life, the world:	1	2	3	4	5	6	7	
completely confuses me				(neutral)			fits meaningfully with my life	
13. I am a:	1	2	3	4	5	6	7	
very irresponsible person				(neutral)			very responsible person	
14. Concerning man's freedom to make his own choices, I believe man is:	7	6	5	4	3	2	1	
absolutely free to make all life choices				(neutral)			completely bound by limitations of heredity and environment	
15. With regard to death, I am:	7	6	5	4	3	2	1	
prepared and unafraid				(neutral)			unprepared and frightened	
16. With regard to suicide, I have:	1	2	3	4	5	6	7	
thought of it seriously as a way out				(neutral)			never given it a second thought	
17. I regard my ability to find a meaning, purpose, or mission in life as:	7	6	5	4	3	2	1	
very great				(neutral)			practically none	
18. My life is:	7	6	5	4	3	2	1	
in my hands and I am in control of it				(neutral)			out of my hands and controlled by external factors	
19. Facing my daily tasks is:	7	6	5	4	3	2	1	
a source of pleasure and satisfaction				(neutral)			a painful and boring experience	
20. I have discovered:	1	2	3	4	5	6	7	
no mission or purpose in life				(neutral)			clear-cut goals and a satisfying life purpose	

PART B

Make complete sentences of each of the following phrases. Work rapidly, filling in the Blanks with the first thing that pops into your mind.

1. More than anything, I want _____
2. My life is _____
3. I hope I can _____
4. I have achieved _____
5. My highest aspiration _____
6. The most hopeless thing _____
7. The whole purpose of my life _____
8. I get bored _____
9. Death is _____
10. I am accomplishing _____
11. Illness and suffering can be _____
12. To me all life is _____
13. The thought of suicide _____

PART C

Write a paragraph describing in detail your aims, ambitions, goals in life. How much progress are you making in achieving them?

APPENDIX C
DIMENSIONS OF RELIGIOUS COMMITMENT SCALE

INSTRUCTIONS: Please DO NOT write on this sheet. Use the answer sheet. Listed below are a number of questions concerning religion. There are no right or wrong answers. You will probably agree with some items and disagree with others. Please check the response which comes closest to what YOU THINK about YOUR OWN ATTITUDES. First impressions are usually best in such matters. Please work as rapidly as possible.

1. Which of the following statements comes closest to what you believe about Jesus?

- (1) Jesus is the Divine Son of God and I have no doubts about it.
- (2) Although I have some doubts, I feel basically that Jesus is Divine.
- (3) I feel that Jesus was a greatman and very holy, but I don't feel Him to be the Son of God anymore than all of us are children of God.
- (4) I think Jesus was only a man although an extraordinary one.
- (5) Frankly, I'm not entirely sure there was such a person as Jesus.

2. The Bible tells of many miracles, some credited to Christ and some to other prophets and apostles. Generally speaking, which of the following statements comes closest to what you believe about Biblical miracles?

- (1) I am not sure whether these miracles really happened or not.
- (2) I believe miracles are stories and never really happened.
- (3) I believe miracles happened, but can be explained entirely by natural causes.
- (4) I believe the miracles happened and can be only partly explained by natural causes.
- (5) I believe the miracles actually happened just as the Bible says they did.

3. What do you think is the truth of the statement "the Devil actually exists"?

- (1) completely true
- (2) probably true
- (3) probably not true
- (4) definitely not true

4. Have you had a feeling you were somehow in the presence of God?

- (1) Yes, I'm sure I have.
- (2) Yes, I think I have.
- (3) No, I do not think I have.
- (4) No, I'm sure I have not.

5. Have you had a sense of being saved in Christ?

- (1) Yes, I'm sure I have.
- (2) Yes, I think I have.
- (3) No, I do not think I have.
- (4) No, I'm sure I have not.

6. Have you had a feeling of being punished by God for something you have done?

- (1) Yes, I'm sure I have.
- (2) Yes, I think I have.
- (3) No, I do not think I have.
- (4) No, I'm sure I have not.

7. Have you had a feeling God tried to communicate with you directly?

- (1) Yes, I'm sure I have.
- (2) Yes, I think I have.
- (3) No, I do not think I have.
- (4) No, I'm sure I have not.

8. Have you had a feeling of being tempted by the devil?

- (1) Yes, I'm sure I have.
- (2) Yes, I think I have.
- (3) No, I do not think I have.
- (4) No, I'm sure I have not.

9. How often in the last year have you taken part in any activities or organizations of your church other than attending services?

- (1) Once a week or oftener.
- (2) Two or three times a month.
- (3) Once a month.
- (4) A few times a year or less.
- (5) Never.

10. How often, if ever, did you go to confession in the last year?

- (1) Once a week or oftener.
- (2) Once or twice a month.
- (3) A few times a year.
- (4) Once a year.
- (5) Never.

11. Practising artificial birth control is a serious sin.

- (1) Strongly agree.
- (2) Agree.
- (3) Undecided.
- (4) Disagree.
- (5) Strongly disagree.

12. There is an afterlife in which God will punish or reward a person for the way he lived on earth.

- (1) Strongly agree.
- (2) Agree.
- (3) Undecided.
- (4) Disagree.
- (5) Strongly disagree.

13. It is a serious sin to discriminate against someone because of his race.

- (1) Strongly agree
- (2) Agree
- (3) Undecided
- (4) Disagree
- (5) Strongly disagree

14. The Priest wants you to read a particular book. You do not want to read it. What would you really do?
- (1) Read the book
 - (2) Refuse to read it
15. You want to vote for a particular person in a high school election, but you know the Priest would like you to vote for the other person. What would you really do?
- (1) Vote for the "particular person".
 - (2) Vote for the "other person".
16. The Priest wants you to go to a Catholic college. You do not want to go. What would you really do?
- (1) Go to the Catholic college.
 - (2) Refuse to go.
17. How sure are you that you have found the answers to the meaning and purpose of life?
- (1) I am quite certain and I pretty much grew up with knowing these things.
 - (2) I am quite certain although at one time I was pretty uncertain.
 - (3) I am uncertain whether or not I have found them.
 - (4) I am quite sure I have not found them.
 - (5) I don't really believe there are answers to these questions.

INSTRUCTIONS: Please answer the following questions.

18. Respondent's sex
- (1) male
 - (2) female
19. Respondent's age
- (1) 16 (2) 17 (3) 18 (4) 19 (5) 20
20. Respondent's background in Catholic schools
- (1) Grades 1 to 12
 - (2) Grades 7 to 12
 - (3) Grades 9 to 12
 - (4) Grades 10 to 12
 - (5) Grade 12 only
21. Is your father Catholic?
- (1) Yes
 - (2) No
 - (3) Don't know

22. To what degree would you say religion NOW has an influence on your father's life?

- (1) very strong
- (2) quite strong
- (3) strong
- (4) slight
- (5) none

23. Is your mother Catholic?

- (1) yes
- (2) no
- (3) don't know

24. To what degree would you say religion NOW has an influence on your mother's life?

- (1) very strong
- (2) quite strong
- (3) strong
- (4) slight
- (5) none

INSTRUCTIONS: Would you please answer the remaining questions using PART 2 of your answer sheets:

1. Which of the following statements comes closest to what you believe about God?

- (1) I know God really exists and I have no doubts about it.
- (2) Although I have doubts, I feel that I do believe in God.
- (3) I find myself believing in God some of the time, but not at other times.
- (4) I don't believe in a personal God, but I do believe in a higher power of some kind.
- (5) I don't know whether there is a God and I don't believe there is any way to find out.
- (6) I don't believe in God.

2. How often, if ever, in the last year, did you attend church services?

- (1) Twice a week or oftener.
- (2) Once a week
- (3) Two or three times a month
- (4) Once a month
- (5) A few times a year or less
- (6) Never

3. How often have you prayed in the last year?

- (1) Three times a day or oftener
- (2) Once or twice a day
- (3) Two or three times a week
- (4) A few times a month
- (5) A few times a year
- (6) Never

4. How often have you received Communion during the last year?

- (1) Twice a week or oftener
- (2) Once a week
- (3) Two or three times a month
- (4) Once a month
- (5) A few times a year or less
- (6) Never

5. The Great Western Schism in the Catholic Church occurred in which of the following centuries?

- (1) 15th (2) 16th (3) 17th (4) 18th (5) 19th (6) 20th

6. Most of the Twelve Apostles who followed Jesus were:

- (1) fishermen
- (2) farmers
- (3) rabbis
- (4) tax collectors
- (5) beggars
- (6) hermits

7. The Dogma of the Assumption was solemnly defined in which one of the following years?

- (1) 1976 (2) 1964 (3) 1950 (4) 1906 (5) 1411 (6) 801

8. Give the names of the four men whom you think wrote the four gospels.

- | | |
|------------|-------------|
| (1) John | (5) Paul |
| (2) Andrew | (6) Matthew |
| (3) Luke | (7) Peter |
| (4) Mark | (8) James |

9. The Second Vatican Council was called together by Pope:

- | | |
|----------------|-----------------|
| (1) Paul VI | (4) Pius XI |
| (2) John XXIII | (5) Benedict XV |
| (3) Pius XII | (6) Pius X |

10. The four Gospels were first written in:

- | | |
|-------------|------------|
| (1) Aramaic | (4) Latin |
| (2) Hebrew | (5) Arabic |
| (3) Greek | (6) French |

APPENDIX D
VARIMAX LOADINGS ON 11 FACTORS OF
THE PIL AND SONG TESTS

Varimax Loadings on 11 Factors

Variable	1	2	3	4	5	6	7	8	9	10	11	h^2
Think about ultimate meaning of life		0.79										0.71
Need for real meaning		0.38				0.32					0.39	0.61
Attempt new activities then lose interest								0.77				0.72
Feeling life incomplete	-0.33	0.43										0.57
Restlessness	-0.34	0.34								-0.34	0.34	0.59
Greatest Fulfillment yet to come					0.55						0.32	0.63
Hope for exciting future					0.76							0.65
Dream of New Identity					0.40		-0.43			-0.37		0.63
Feel lack of real meaning		0.61										0.59
Think of achieving new and different					0.44	0.35						0.53
Change of main life objective				0.75								0.62
Puzzled and disturbed by mystery of life		0.68										0.65
Need new lease on life		0.49										0.57
Attempt new goal before old one complete				0.45		0.38						0.63

Variable	1	2	3	4	5	6	7	8	9	10	11	h ²
Need for adventure						0.77						0.67
Urge to find self		0.76										0.69
Life goal found, then lost		0.37		0.53								0.60
Aware of consuming life purpose			0.39					-0.52				0.57
Lack of worthwhile job	-0.31			0.34						0.41	0.52	
Determination to achieve beyond ordinary						0.67						0.55
Enthusiasm/boredom	0.71											0.62
Excitement/Routine	0.78											0.67
Very clear goals/ no goals			0.40	-0.62								0.67
Meaningful goals/ meaninglessness	0.54		0.43									0.57
Constant newness/ sameness	0.70											0.62
Desire for many more lives/Choose never to be born	0.48						0.59					0.65
Post-retirement excitement/ Chance to loaf									0.78			0.71

Variable	1	2	3	4	5	6	7	8	9	10	11	h^2
Progress in life goal achievement/No progress	0.43		0.33									0.56
Exciting Life/Despair	0.70											0.69
Worthwhile Life/Completely worthless life	0.57		0.34									0.51
Clear reason for existing/Wonderment	0.32		0.59									0.58
Meaningful role in world/Confusing role			0.59				0.39					0.65
Responsible/Irresponsible												0.69
Absolute freedom/Bound by heredity and environment								0.82				0.57
Prepared and unafraid of death/Unprepared and frightened							-0.35	0.39			0.42	0.64
Serious suicide thoughts/never							0.70					0.64
Great ability to find life meaning/None			0.68									0.55
Control over life/Controlled by externals	0.37		0.32								0.41	0.59
Pleasureful daily tasks/Boring	0.70		0.30									0.64
Clear cut life mission/none			0.63	-0.33								0.65

TOTAL VARIANCE ACCOUNTED FOR = 61.82 per cent

B30213